



SDI Review Form 1.6

Journal Name:	<u>International Journal of TROPICAL DISEASE & Health</u>
Manuscript Number:	2013_IJTDH_6962
Title of the Manuscript:	Studies on the Pattern of Plasmodium falciparum among settled Fulani Pastoralists in Rivers State, Nigeria
Type of the 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.

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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	Nomadic populations constitute a significant proportion of the population in many sub-Saharan African countries. The manuscript "Studies on the pattern of <i>Plasmodium falciparum</i> among settled Fulani Pastoralists in River State, Nigeria", evaluate the prevalence of malaria among this population. The data presented here is relevant to plan and integrate this nomad group in control programs. However, I suggest that further attention should be taken and these are listed below as comments for major revision. Major revision 1) Material and methods Studied area and sample population: Very little information is given about the studied groups. They should be described in details. When was the cross-sectional study performed? What was the prevalence of symptoms in the population? Any case of complicated malaria? All patients were treated after diagnosis? The study was approved by an ethical committee? What is the pattern of Fulani pastoralist's	The study was carried out in six bush encampments in six communities of Rivers State, Ahoada, Bori, Elele, Eleme, Elenwo and Oyigbo. Rivers State lies at latitude 4°45' north and longitude 6°50' east and lies along Bonny River in the Niger Delta, Rivers State has tropical rainforests as well as mangrove and salt water swamps with an average rainfall of 2,500cm³. Temperature range



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	movements? They migrate along conventional routes or also move into different areas each year? It is not clear how malaria was diagnosis. It seems that the thick blood smear was used to determine positives and negatives while the thin blood smear was used to species identification by examining 100 fields in the thick blood smear. An expertise in malaria diagnosis should be capable to diagnosis the Plasmodium species in most of the thick blood smear. What was the prevalence of <i>P. falciparum</i> among the positives? What other Plasmodium species circulate in the area?. Include detailed statistical analysis used to see differences. Results Tables should be improved (I suggest to draw lines separating headings and body of the table). Table 1. The No examined in Oyigbo is 101 instead 1010. Table 4 and 5. Parasitemia data should be displayed as number of parasite/μl of blood (median and interquartile ranges). It is a more accurate way to present the data and see differences between groups. Last Table (without number – probably Table 7) . It would be interesting to make a legend explaining what kind leaves and animal drugs they	between 28^oc to 33^oc which supports the rainforest type of vegetation and relative humidity is high in the State throughout the year and decreases slightly in the dry season. In this study, source population consisted of Fulani pastoralists who has migrated to and settled in River State for the past four years before this study between November 2009 and January 2011. The Fulani herdsmen were selected randomly (systematic random sampling). Fulani pastoralists live with their families in the bush camps from where they herd their animals in search of green pasture. The bush encampments lack modern infrastructural facilities such as pipe-borne water, adequate waste disposal system, electricity and health facilities. November 2009 and January 2011 Yes, there were cases of complicated malaria. The study did not take record of prevalence of symptoms, though fever, High temperature and headache were very
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	use). It is not clear if the data in this table mean if they believe on preventing malaria by using prevention measures or if they used it. Moreover, preventive measures to be effective they need to be used always therefore it is difficult to get any conclusion with this table. The results are very poor described and data showed in tables are not well explored. The first paragraph explains the sentence “<i>Plasmodium</i> species isolated were all <i>P. falciparum</i>. Parasites were isolated? What was the rational for isolation of parasites and what method was used. In table 2 the number of females infected in Elele is very low compared with the other location. This data is not mentioned. The tables 4 and 5 might show difference between age groups if data is presented as parasite/μl (median and interquartile ranges). The discussion is also very poor and should be improved.	high among the participant examined. Yes, they were treated with antimalaria drug Larimal (ACT). However, treatment was not part of the work but during the course of study we discovered high prevalence and no aid were given we decided to treat the positive participants. Yes, the study was approved by an ethical committee. View text . The pattern of Fulani pastoralist’s movements, is that they migrate along conventional routes and settle with their families there for as much as 3-7years or more , If conditions are favorable . The thin films were fixed with methanol and all films were stained with 3% Giemsa stain of pH 7.0 for 30 min and examined for malaria parasites using standard quality and controlled procedures as recommended by [9]. Taking the number of leucocytes per micro liter of blood as 8,000, parasite density of blood using the thick film was expresses as parasite count (X) 8,000 divided by number of WBCs counted. Thick blood films were used to determine the parasite densities while thin blood films were used to
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		identify the parasite species. Stained slides were examined under the light microscope using x 100 objective lens (immersion oil). The presence and level of parasitemia was recorded. A sample was recorded as positive, on the microscopic detection of any <i>Plasmodium</i> stage on the slide. Plasmodium species detected were all <i>Plasmodium falciparum</i>. <i>Plasmodium</i> species detected were all <i>Plasmodium falciparum</i>. Parasites were not isolated rather the term observed is used Data was analysed statistically using ANOVA. Values were considered statistically significant at $P < 0.05$ Results Tables have been improved, please view text. Lines separating headings and body of the table drawn. Table 1. The No examined in Oyigbo is 101 not 1010, corrected. The results were recast and tables explored. Please view texts. tables 4 and 5 might show difference between age groups if data is presented as parasite/μl (median and interquartile
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		ranges). This was no done in this study The discussion is improved.
<u>Minor</u> REVISION comments	Minor revision The manuscript should be revised for format (check the left and right page margins format) and spelling. The word <i>Plasmodium</i> is always written with capital letter and the word in italic.	Yes, have done the format but the left and right margins were not given. The word <i>Plasmodium</i> has been corrected please check text
<u>Optional/General</u> comments	All studies should have approval from ethical comitee and the authors should mention the approval in the manuscript.	ETHICAL APPROVAL Ethical approval was gotten from the ethical committee of the Rivers State Ministry of Health before the commencement of this research.