



SDI Review Form 1.6

Journal Name:	International Journal of TROPICAL DISEASE & Health
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.

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

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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	1. The author should address a few typos observed in the text. 2. Materials and methods section: Major issues arise here and include a. Study design should be clarified by the author The study location can be improved upon. This section should address the proper geography of the locations and should provide the climatic characteristics of this part of the country. b. The section of methodology highlighted here is unnecessary and could come off the text: "They move from the northern part of Nigeria during the end of the dry season to the south-eastern part, mainly for green pasture for their animals. Epidemiologically, this exposure	Had done that, please check text Study area, Study Subjects and Criteria for Eligibility The study was carried out in six bush encampments in six communities of Rivers State, Ahoada, Bori, Elele, Eleme, Elelenwo 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 between 28°C to 33°C 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,



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	makes them very susceptible to the attack of vectors of filariasis and <i>Plasmodium falciparum</i> infection. However, the Fulani pastoralists prefer to camp near water bodies usually at river-banks, stream or stagnant ponds. Their living near a water source was to complement for all their domestic water needs, such water source could as well serve as a major breeding site for various disease vectors affecting them.” c. What sample size is the author working with? d. How did the author select subjects from the study locations? e. The number of subjects from each study location appears arbitrary but if systematic random sampling technique is employed, the study location population will determine the representative sample from each study location. f. The statistical analysis is not stated	electricity and health facilities. Pre-survey contact and mobilization Before the commencement of the survey, advocacy visits were made to the Fulani heads called Seriki in all the bush encampments chosen for the study. They were duly consulted and this was necessary to ensure maximum co-operation from the Fulani's. Considering the strict socio-cultural and religious observances peculiar to the Fulani's, this preceded actual data collection This has been removed, check text 593 systematic random sampling technique Please view table 2
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	so how can the reader interpret the author's results. The author should clearly state his statistical plan. g. Ethical issues loom large in this study. It is no longer considered a good conduct to carry out this type of survey without documented ethical processes. Did the study subjects have information on the study? Was the participation voluntary? In the words of the author the Fulanis are the <i>most ignored</i> section of the society in the country. That makes them a vulnerable population. What ethical steps did the author take to assure the general society that they were not induced or coerced to participate in this study? Any informed consent obtained? These issues need to be addressed.	Data was analysed statistically using ANOVA. Values were considered statistically significant at $P < 0.05$ Ethical approval was gotten from the ethical committee of the Rivers State Ministry of Health before the commencement of this research Before the commencement of the survey, advocacy visits were made to the Fulani heads called Seriki in all the bush encampments chosen for the study. They were duly consulted and this was necessary to ensure maximum co-operation from the Fulani's. Considering the strict socio-cultural and religious observances peculiar to the Fulani's, this preceded actual data collection Oral consent was given by each Fulani before commencing this study
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Minor REVISION comments	1. Parasitological studies: a. The staining technique should be reviewed in some more details. b. It appeared that the formular for parasite counting was not used. The reported parasite intensity therefore falls short of expectation as it does not follow the planned methodology set out by the author. 2. PCV determination: a. It appears that the author is not familiar with the equipment used to measure PCV. The Microhaematocrit centrifuge is used to centrifuge capillary blood. The reading is done with the microhaemacrit reader. This section should be re-written. 3. Results/Tables: a. Tables 1-3 will change depending on the calculated sample size for each study location with reference to the population of the study locations.	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 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. PCV determination was done using hematocrit centrifuge according to Cheesbrough. Blood sample was allowed to enter a heparinized capillary tube until the tube was three quarter filled. Then sealed with a sealant, it was then spurned in centrifuge for 5 minutes at 5,000rpm. After which the values were obtained directly from a micro haematocrit reader Table one was changed to reflect parasites species identified in the study.
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	However, if this has been considered, the author should state clearly in the text how calculation was arrived at. b. Table 4 has some labelling to review. Also, the parasite count using stated formula should be reflected in this table not estimates <i>per high power</i> field provided. 4. Discussion: In view of the comments above, the discussion would require review. 5. Overall, this promises to be a substantial contribution to knowledge, but the issues raised could be considered to raise the quality of the article beyond its present form.	<u>No. infected</u> <u>100</u> No. examined x + (low density) ++(moderate density +++(High density ++++ (Very high density Discussion reviewed, please check text I strongly appreciates that
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<u>Optional/General</u> comments	a. Ethical issues loom large in this study. It is no longer considered a good conduct to carry out this type of survey without documented ethical processes. Did the study subjects have information on the study? Was the participation voluntary? In the words of the author the Fulanis are the <i>most ignored</i> section of the society in the country. That makes them a vulnerable population. What ethical steps did the author take to assure the general society that they were not induced or coerced to participate in this study? Any informed consent obtained? These issues need to be addressed.	Please check above
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