



SDI Review Form 1.6

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	Ms_IJTDH_32540
Title of the Manuscript:	Investigating associative impact of Indoor Residual Spray and Insecticide Treated Nets for minimizing Visceral leishmaniasis vector population in Bihar (India).
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	Introduction - Lines 34-35 state the limitations associated with single intervention use, either IRS or ITNs - Line 73 'Division of this institute'- which institute? - Line 87, state how <i>P. argentipes</i> were identified and give citation of the methods used - Line 90 what does the numbers 255 and 270 represent? Which of the two is the total? - Line 106 state the post intervention time before sand fly density evaluation - Line 133-134 state when the pre- and post-treatment sand fly densities were determined - Line 158 'male population was slightly higher than the female population' state the figures and the statistical differences if any Results Demographics: Presenting the results in range proportion doesn't	- The Introduction section has been completely changed now. - Corrected and Highlighted - The statement now has been corrected quoting citation as well highlighted too. - Here 255 & 270 represents the total no. of ITNs being distributed among the residents at the site allotted for ITN and IRS+ITN observation. However, the statement now has been simplified for easy understanding to the readers. - This information was already dealt under section 'Study sites and Study Period'. However, the sentence were re-framed and briefed in the required section. - Here the sand fly collection done before the implementation of Insecticide Treated Material (i.e., IRS or ITN or Both) in September 2014, were considered as 'Pre- treatment sand fly density' whereas after intervention of ITMs the observatory period for assessing sand fly density (from October 2014-October 2015) were taken as 'post treatment sand fly density'. - As the main objective of the present study was to analyze the field efficacy of a combination strategy of IRS+ITN (PermaNet 3.0[®]) versus single interventions with IRS and ITNs alone comparing with control respectively. This section is only meant to deal the socio-demographic status of study sites. Hence, just for the information regarding that, an overview has been presented in this section. However, the detailed description on these parameters is well-explained in the mentioned table.



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	make sense at all i.e - How can illiteracy rate range between 37% - 72%; literacy between 9.43% - 15.78%; majority of houses thatched 38.5% - 55.1%; and mud plastered 9.2% - 21.7%, proportion of houses with cattle sheds 26% - 57% etc. It is not clear what authors are trying to communicate here, the results could better be presented by stating the exact value and not the range. Authors are advised to re-do the whole section on demographics. - Line 167 'roughly one quarter of houses' is not proper language for results presentation, present the actual results. - Lines 175-176, since you have stated the total number of <i>P. argentipes</i> collected, you need not to repeat the actual values for AT and LTT, the percentages are sufficiently enough otherwise its double presentation of the same results. - Table 2, re-write the caption and remove the word "classified" - Table 2: Since you have stated the total number and percentages of the samples collected by both AT and LTT in the first row; for the subsequent rows simply present the results once either by percentages or actual values. The presentation of the same results in both percentages and actual values makes it redundant - Lines 192-197 simply present your findings and not discussion, this is the results section - Table 3: Corrected mortality is supposed to be calculated if the mortality rate in the control mortality is between 5-20%. It would be nice to hear from authors to why they decided to do corrected mortality in cases where the	- As per the reviewer's instruction, the details of observed parameters and probable reason behind it and conclusion configuring out the socio-demographic status at the studied site are now completely re-done and re-written in the section. Hope this may satisfy the reviewer this time. - Corrected as per the reviewer's instruction - Corrected as per the reviewer's instruction - Corrected as per the reviewer's instruction - Corrected as per the reviewer's instruction. Now the table contains the respective data in percentage form only. - Yes we do comply with reviewer's suggestion of dealing only result in the result section but that statement highlighting the importance of technique and its effect on vector population at different situation is important information observed from this result needed to be dealt at this section only for continuity maintenance; otherwise it will look quiet awful. However, in the discussion section, we are remained focussed onto our main objective i.e., comparing the efficacy of IRS, ITN and IRS+ITN for controlling VL vector population. - Good Question....!!!! As per the WHO guidelines, The mortality of test sample is calculated by summing the number of dead insects across all exposure replicates and expressing this as a percentage of the total number of exposed insects: Observed mortality = Total number of dead insects / Total sample size x 100 A similar calculation should be made in order to obtain a value for the control mortality. If the control mortality is above 20%, the tests must be discarded. When control mortality is greater than 5% but less than 20%, then the observed mortality has to be
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	mortality values of the control groups are ZERO Discussion • Lines 277-302, authors are instructed to discuss their findings and relate them to previous studies instead of re-doing literature review • Authors did not discuss their findings at all, they are advised to re-do the whole section Conclusion • The conclusion made are not pertinent to the study findings	corrected using Abbots formulae. Therefore, as in our study, exhibiting ZERO control mortality, corrected mortality corroborates with the observed mortality percentage only. • The mentioned section i.e., Discussion and Conclusion section has been completely changed now citing new references relevant to the present study and are incorporated the revised manuscript. • The mentioned section i.e., Discussion and Conclusion section has been completely changed now citing new references relevant to the present study and are incorporated the revised manuscript.
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<u>Minor</u> REVISION comments	Title: remove the full stop on the title Suggestion: the word “associative” can be replaced by the word “combined” Abstract: The results section of the abstract is not clear, • ‘Lowest numbers and highest percent-reduction of sand flies (93.59% -100%)’ highest percentage reduction is not shown, from which figure to what figure, any statistical test? • ‘Also, the acceptance of the combined approach by the community was highest as compared to the single-intervention approaches’- How did they arrive to this conclusion? Not stated in the method section in the abstract • Citation is needed at the end of line 70	• Corrected as per the reviewer’s suggestion • However, both ‘combine’ and ‘associate’ means ‘to join two things together’. Here we feel the terms “associate” to be most appropriate as despite of having their own limitations, IRS and ITN are provided equal opportunity for its exploitation under successful vector control strategy. • This section has been completely re-written & incorporated in the revised version of manuscript • This section has been completely re-written & incorporated in the revised version of manuscript • Reference added at suggested position.
<u>Optional/General</u> comments	While the research question is very relevant and interesting the manuscript itself lacks a proper work-through tying introduction, discussion and conclusion together. The language requires a good deal of work. Many places prepositions are lacking and generally the language worsens as the article progresses. Some sentences are very difficult to understand, one example is line 65 ‘during 0600 am to 0800 pm- 0800pm is it diurnal?’, line 90, Lines 159-160,186 etc Researchers were supposed to seek consent before collecting sand flies (indoors) as well as before carrying out Interviews	• Thank you reviewer for your worthy and needful remarks and suggestions upon this MS, following to your suggestions, our manuscript now has experiencing a major revisions. We have tried to cover up all the facets existed in the manuscript (as introduced by the reviewers) for convincing the readers. Hope for the reviewer’s satisfaction with the revised version of Manuscript. • Definitely Yes, We do agree with the reviewer’s worthy remark and we had already obtained the needful consent before the initiation of study at the selected sites. For this, door-to-door surveys were conducted by the trained interviewers using questionnaire sheet, purposely designed for obtaining information regarding socio-economic status of householders and the protective measures taken against nuisance of insects. Also, after getting approval from the House hold owners only, we moved for the assessment of sand fly density via installation of Light Traps or conducting manual collection through aspirator. These are well detailed in the MS under section Baseline interview survey.