



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	Ms_IJTDH_37916
Title of the Manuscript:	Nine Years of Malaria Cases in Bangladesh: A Time Series Analysis
Type of Article:	

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
I am quite surprised that after my first review, there are still a lot of instances where corrections were not made. If the authors are not ready to improve on their writing skills, I will find it difficult to review this paper again. There are still so many typographical errors that have been corrected in the manuscript which I am now sending to you. Also, the authors should add more references in the Introduction and discussion parts of the paper. The authors should go over my corrections in the first and second reviewed paper line by line and correct each part of the document as I have highlighted. They should not be in a hurry. Dengue is of importance to the world.	Thank you for reviewer comments. We acknowledged the reviewer in – depth review and suggestion, and we also made the correction accordingly. We have changed the writing in 2nd version of revised manuscript according to all comments except one point in results section. We have discussed below with important comments made by the reviewer. Abstract : Abstract section has been changed in line with reviewer comments. 1.The following sentences P02.16-17 (Line 16-17 in page 02) under result section have been changed (underlined) in 2nd version : <i>The study showed that malaria prevalence was higher in males (57.86%) than females (42.13%) and older age group of 15 years and above (59.3%) more than in other younger age groups</i> Introduction : 2. Introduction section has also been rewritten according to reviewer comments. We have also changed writing style to simplify the sentences e.g. P04.09-10 (Line 09-10 in page 04) in a following way: <i>This unusual increase in malaria cases also occurred in Northeastern districts of India that close to Bangladesh, where malaria cases were almost double in 2014 than that of 2013 [6].</i> Here we consider important comments made by the reviewer (bold) which has been changed (underlined in italic format) in the 2nd version revised of manuscript. .in 2016 resulting in... (Please complete this statement. Then start the next statement as: Malaria infection mostly occurs in rural areas, in close proximity... 3. P03.16-19 (Line 16-19 in page 03) <i>Malaria positivity decreased from 84,690 in 2008 to 27,737 in 2016 resulting very few cases happened in a year in low endemic areas. Now malaria infection mostly occur in rural areas which is close proximity to hard to reach areas and/or to fringe or deep forest under Chittagong Hill Tracts (CHT), and Cox's Bazar districts.</i>



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	Material and methods This section has been changed according to reviewer comments. Results 4. The following sentences P 07.04-06 (Line 04-06 in page 07) have been changed according to the reviewer comments (underlined). <i>Overall, 57.8% of malaria infected <u>patients were male and 42.2% were female (Fig. 3).</u> Malaria prevalence was higher in age group 15 years <u>and above (59.3%) and least among those aged <1 years (1%) (Fig. 4).</u></i> 5. Here is a comment regarding Figure 3:page 08 (Original manuscript) This legend is misleading. It may read January 10, January 11... January 17 while you may mean January, 2010, January, 2011... January 2017. Also Your coverage say 2008-2016 but your graph shows Jan 17. Please correct this Thank you for reviewer comment and we just deleted Figure 3 in 2nd version of revised manuscript in line with overall comments on figure by the reviewer. However, the Figure 6 which was numbered 10 in original manuscript has been changed in respect to above comment. 6. Regarding the comment in page 09 (original manuscript) Delete all these because they do not add more value to what you have already said We have changed the writing according to the above comment made by the reviewer. Actually malaria control programme is the combination of different strategy to control the malaria transmission by different vectors. Malaria is mostly caused by <i>Plasmodium falciparum</i> and the decrease of malaria depends on the rate of decreasing of Pf malaria. But the different scenario is <i>P. vivax</i> malaria increased after 2013 which we considered as a paradigm shift and Bangladesh should take different strategy to contain <i>P. vivax</i>. <i>P. vivax</i> parasites can remain dormant in the liver for several months and even up to a year or more. When these dormant parasites reactivate they can cause relapses of febrile illness, and we found number of relapse cases in low endemic areas. We think the discussion and analysis of different species is important and relevant to understand malaria epidemiology in Bangladesh, so therefore, we concise the paragraph and merged it under the paragraph of page 06 (underlined) as follows: <i>The study shows there was significant annual decline in malaria incidence over the years with a high peak in 2014. Malaria incidence continued to fall till 2013 (32% as of 2008) and then it suddenly increased in 2014 before decreasing in the following two years 2015 and 2016. Both <i>P. falciparum</i> and <i>P. vivax</i> also decreased by 75% and</i>

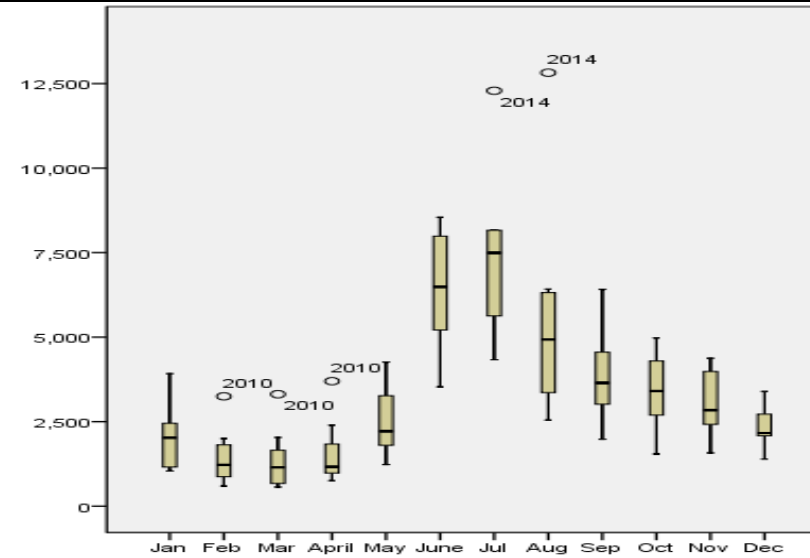


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	<u>77% respectively from 2008 to 2016 (Table 1). Since 2008, Plasmodium falciparum declined steadily [$R^2=0.86$, $P\text{-value}=0.003$] while <i>P. vivax</i> showed the fluctuation, increased after the year 2013 which is not significant (Fig. 2).</u> However, we have also deleted Figure 6 (original manuscript) in line with reviewer comment. 7. Regarding the comment in page 10 (original manuscript) There are too many Figures which I'm sure the journal will not publish all. maximum of 5 figures should be okay and use the other figures for two other papers. You put all your eggs in the same basket. This is not economical. Thank you for reviewer comment. We tried hard to best use of reviewer comment. However, finally we dropped 5 figures and retain 10 figures which are logical, relevant and complement to our discussion point. The deleted figures from original manuscript are : 1. Figure 1: malaria positive (2008-2016) 2. Fig 3: Monthly malaria incidence with moving average 3. Fig 6 :Trend of malaria cases with Pf, Pv and mixed 4. Fig 9: Severe malaria cases in CHT and Cox's bazar Districts 5. Fig 13: Malaria cases in Mymensingh Region in 2008 and 2016 8. Regarding Figure 10: page 13 (original manuscript) Please label CHT as 1, Cox's Bazar as 2 and Mymensingh as 3 for clarity purpose Yes the reviewer is quite right and we agree with the point. We rephrased the title of Figure 6 (2nd version) with a, b, c: Malaria trend in a) CHT, b) Cox's Bazar and c) low endemic districts with moving average. As we mentioned before that we have changed Figure 6 in X axis with January 2016 in line with reviewer comment no. 5_A 9. Regarding Figure 15: page 15 (original manuscript) But this graph shows malaria cases for just one year. Figure 15 (original manuscript) should not have (2008-2016). Yes, the reviewer is correct; the figure is for 2010-2016. Actually the Figure 10 in 2nd version is a box-plot diagram where each month-wise box defines the median point of six years data (2010-2016).
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With this diagram we can conclude that malaria cases were more than 12000 cases in July and August 2014 while malaria cases were relatively low in Jan-April where it was highest in 2010.

This figure is an important evidence for seasonal variability in Bangladesh with one peak in rainy season.

. Discussion

10. Discussion section has also changed in line with reviewer comment.

The following sentences P 13.07-09 (Line 07-09 in page 13) and P14.09-11 (Line 09-11 in page 14) under 2nd version of revised manuscript have been changed according to the reviewer comments (underlined).

Plasmodium vivax initially declined steadily but reversed and increased slightly after 2013, indicating a paradigm shift, similar to the report of another Ethiopian study [9].

The pre dominance of malaria infection in adult population of Bangladesh may be associated to the relative proportion of the adult population and the growing younger generation shift in Bangladesh.

Conclusion

11. Conclusion section has also been changed according to the comments made by reviewer.

1. We would like to thank the reviewer for his/her comments and we have also deleted 5 figures (listed under_7A) from original manuscript. I think the figures which are kept in 2nd version of revised manuscript will find easy, convenient and logical for objective setting and compliance with the manuscript title.



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	2. We agree with the reviewer comments and we have also revised the Reference section according to the reviewer comments as well as journal guideline. a. We have been used six authors' (if available) followed by et al b. The reference those referred in the test is only listed in the Reference section. c. Most of the references have Digital Objective Identifier number if it is available in respective article. However, we have been added three references in 2nd version of revised manuscript: 4. U Haque, S M Ahmed, S Hossain, M Huda, A Hossain, R Hoque. Malaria Prevalence In Endemic Districts of Bangladesh. Plos One. 2009;4(8):e6737. http://dx.doi.org/10.1371/journal.pone.0006737. 5. M S Alam, M Moktadir, M S Hossain, W Ali khan, Be-Nazir Ahmed, Akramul Islam. Reduction in malaria prevalence and increase awareness in endemic districts of Bangladesh. Malaria Journal. 2016;15:552. http://dx.doi.10.1186/s12936-016-1603-0 14. R J Maude, R Amin, E Bin Yunus, M Ridwanur, A M Bangali, M A Faiz et al. Temporal trends in severe malaria in Chittagong, Bangladesh. Malaria Journal. 2012;11:323. https://dx.doi.org/10.1186/1475-2875-11-323
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