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Shui Qiu
Science Editor, Editorial Office
Baishideng Publishing Group, Inc.

Dear Editor:

Thanks a lot for offering us the opportunity of revising our manuscript. The enclosed is a revised version of our minireview manuscript (No 27102) entitled, "***A Biological and Historical Overview of Zika Virus***". We also thank the reviewers for their careful reviewing and helpful comments. In the revised manuscript, we have made substantial changes to address the reviewers' comments and to improve the manuscript.

We have addressed the revisions in the manuscript. Below are the responses to each reviewer's suggestions. The **changes** in the manuscript are in **bold** and **red**.

Reviewer #1. This is a relly nice review, that start describing the history of zika. there are some minor points that must be fixed, the taxonomical names should be in italic and there are several words that are attached to each other

Response: The authors agree to these suggestions and the changes have been made.

Reviewer #2. In order to help the readers to better focus the arguments treated in this review I would suggest to insert :

1) a world map figure indicating the spread of zika virus and identifying autochtonous and imported cases, 2) a figure showing a phylogram illustrating the relationships between zika strains and infection's trasmission

Response: We agree that this information is vital. Actually, a real time world map can be found on <http://www.healthmap.org/zika/#timeline>. It is currently displaying the outbreak cases up until June 10, 2016 worldwide. Zhu *et al.* 2016 reported that between 1947 and 2006, <20 cases of *Zika virus* infection have been reported. There have been recent reports of imported cases such as *Zika virus* infections reported in 18 travelers returning to the Netherlands from Surinam, which is in South America near the northern border of Brazil, and the Dominican Republic

(Duijster *et al.* 2016), 13 infections were imported from Venezuela, Fiji/Samoa, or Suriname to China (Zhang *et al.* 2016), and 4 infections were imported from Brazil to Portugal (Zé-Zé *et al.* 2016). Autochthonous cases were reported in places such as Mexico (Jimenez Corona *et al.* 2016), Colombia (Camacho *et al.* 2016), and Easter Island, which was the first outbreak (51 cases) reported in a territory of the Americas in early 2014 (reviewed in Zanluca *et al.* 2016).

3) a more detailed description of the transmission cycle; of zika vectors mosquito species and the danger of world wide spreading

Response: This is very important information. A recent review paper (Saiz *et al.* 2016) discussed the transmission of the Zika virus. This discussion included the mosquito species that serve as vectors for this virus.

4) a more detailed description of clinical symptoms and diagnostic criteria

Response: More information, in particular to how Zika fever is currently diagnosed, has been added.

5) a table indicating the conclusions of the most relevant studies concerning the association of Zika infection with Guillain-Barré syndrome and with microcephaly. Minor point: it is missing the reference to this sentence (page 10) : "...after more detailed and accurate experimental studies..the number of Zika-related microcephaly dropped quickly".

Reviewer #3. A fairly good review on some of the most important aspects of Zika virus epidemiology. I would suggest adding a map illustrating spread and more information concerning clinical symptoms namely the differences, if any, between Dengue and Zika. Please, add a reference at the end of first paragraph, page 9.

Response: In reference to the map, please see the response above. Some additional information on Dengue has been added.

Reviewer #4. Armstrong and colleagues in this review report the published information of Zika virus outbreaks and clinical complications. The authors report main information on basic, epidemical, subclinical and clinical studies performed for Zika virus. The review is well done in several aspect but lack few additional information. Main points

1- In the introduction several aspect of the virus biology are reassumed in Table 1. It could be better if the authors dissect more in deep in the text the virus replicative features.

2- Additional figure reporting ZiKa virus phylogenetic relationships among the other flaviviruses that are human pathogens and their different vector used it could be of interest for the readers.

3- The information on the origin of the two types of Zika virus should be described better.

Response: Information has been added.

4- In the conclusion it should be described better the future studies needed for the Zika virus in comparison with the actual know-out of other flavivirus. Minor points 1- The title should be changed in “ A biological and Historical outbreak Overview of Zika virus” 2- Table 1: the title should be changed in “Roles of Zika Viral protein and RNA during viral infection cycle in permissive cells” 3- Table 2: the title should be changed in “Origin of the types of Zika viruses “

Response: All of the minor points have been addressed.

Reviewer #5. The paper is well written and is a very good review from the state of the art about Zika history and the actual importance of Zika outbreaks. I have only three comments: In page 3, line 3; the word Flavivirdae should be changed to Flaviviridae In page 10, line 10; the acronym GBS should be splitted In page 11, line 2; the acronyms NPC/NSC should be splitted

Response: We have corrected all the typos and spelled out the abbreviations.

Again, we very much appreciate the comments and suggestions of the reviewers. If you have any additional questions, comments, or suggestions, please do not hesitate to ask.

Warm regards,

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