

Review of: "The Imperative of a Comprehensive One Health Approach for Mosquito-Borne Disease Control in Indonesia"

Enrique Yarto-Jaramillo

Potential competing interests: No potential competing interests to declare.

Scientific articles and Perspectives on One Health approaches to vector-borne and zoonotic diseases are greatly needed, focusing on different geographic areas of the world. In the Abstract section, collaboration among different sectors is an important strategy in which it is necessary to expand information on effective communication with a number of sectors and collaboration among diverse parties, mainly because the author considers it an imperative action to establish this program. Specification on sectors and parties being involved in a One Health Approach would strengthen the very first part of this paper.

Introduction: Take this opportunity to give more value to the title of your article by explaining that emerging vector-borne diseases are many times zoonoses, and that zoonotic disease prevention is one of the most important of the five pillars of the One Health approach.

It is known that the One Health concept integrates and addresses complex health problems collaboratively: How would the One Health approach integrate this complex health problem collaboratively in Indonesia? Introduce the potential reader to a transdisciplinary approach versus a reaction to an outbreak; mention the importance of understanding ecological, sociological, economic, and political drivers. Also, point out the need for climate change studies and policies which are key to vector-borne diseases (VBD). In the introduction, it would also be appropriate to highlight the tremendous importance of the link between climate change and vector-borne diseases, stressing the sensitivity of arthropod life cycles to temperature and precipitation.

Interconnectedness of Human, Animal, and Environmental Health: Different issues result in an increase of mosquito populations, so it may be worth to mention that anthropogenic activities such as the creation of suburban green belts and wetlands, which might inadvertently increase the contact between vectors and hosts, were originally thought to mitigate the effects of global warming.

The author mentions the introduction of viruses into the human body, but it is not only viruses but "pathogens" which could be a better term here.

The integration of veterinary surveillance and vaccination programs for livestock.....should also go along with ecological monitoring for wildlife health management plans, long-term datasets informing risk assessments, coordinated strategies for vector-borne threats, and the veterinarian participation in prioritizing vector-borne emerging diseases.

Community engagement and health education. The last paragraph of this section would benefit from the following: I

suggest the author review an interesting article on the evaluation of a health communication campaign to improve mosquito awareness in Western Australia, which is interesting to complement this paragraph with more evidence on campaign models. <https://doi.org/10.3389/fpubh.2019.00054>

Cross-sector collaboration and policy implementation: Interesting concepts have been written in this part of the article.

Whereas I do not know what the situation is like with wild animals under human care in Indonesia in regard to VBD, zoos or other places with captive animals could play an essential role as sentinels of either current or retrospective VBD.

Milnes & Anderson wrote a chapter on tick and VBD for Fowler's Zoo and Wild Animal Medicine book 10, 2023, in the One Health section, which may be of interest to the author to complement this section.

Key focus areas for mosquito-borne disease control in Indonesia

At the end of the first paragraph, I would add climate change studies, forecasts, and policies incorporating health departments, vector control agencies, healthcare providers, academia and industry, public health partners, public and patients, and policy and decision makers.

"Adopting a proactive attitude by fostering interdisciplinary collaboration in efficiently combating mosquito-borne diseases" could include the following professions: veterinarians, wildlife biologists, ecologists, agriculturists, microbiologists, epidemiologists, biomedical engineers, and physicians, among others.

"In addition, the allocation of funds for research, training, and program implementation is essential to eradicate mosquito-borne diseases." Suggestion: Although, in order to start working on a One Health initiative, it might be interesting to form a One Health Zoonotic Disease Prioritization Committee or task force because rarely if at all resources will be disbursed for all of the diseases, so probably suggesting this action may allow the selection of some of the most important and threatening mosquito-borne diseases in Indonesia.

The conclusions of the article will probably be strengthened if the author complements some of the paragraphs and concepts I suggested all along the paper, for her to include more aspects of the One Health approach.

Congratulations on your effort, and I will be glad to respond to any comments on my suggestions, which were made with all due respect.