

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

Lídia Gual-Gonzalez¹

1 University of South Carolina

Potential competing interests: No potential competing interests to declare.

This article provides a review of the importance of the One Health approach in mosquito-borne disease control in Indonesia. The author states the importance of multidisciplinary work and the impact on vector control and policy. It is an important article but needs work. I agree with other reviewers on the references; additional references should be included.

Global comment:

This manuscript addresses a very important topic; however, I believe it requires thorough review, and I would recommend the author to revise the English and wording throughout the entire paper. The text seems written by AI in some parts and should be acknowledged if that is the case.

It is important to be consistent in the capitalization (or not) of One Health. Moreover, One Health is a concept and is often mentioned in the text as an "element," which seems odd.

Moreover, it emphasizes Indonesia practices very little, which is misleading from the title. I recommend including more examples from Indonesia, describing particular challenges that Indonesia is facing, and outlining recommendations for the country.

Specific comments:

Below, I copy sentences from the text and include comments [LG#] specific to those sentences. The comments will be listed below the sentence.

<u>Sentence:</u> "In the last three decades, Indonesia has faced significant vector control challenges, despite the implementation of various control methods, such as the mosquito nest eradication program (PSN), [LG1] 4 M-Plus (draining, covering, burying, and monitoring, plus sowing larvicides, planting mosquito repellent plants, and others), the one-house Jumantik (1R1J) program, and other vector eradication programs; however, these methods have not achieved maximum results. "[LG2]

[LG1]: The abbreviations do not correspond with the words in English; I suggest providing abbreviations in English or not providing them, as they are not used again.

[LG2]: The entire sentence does not continue. It says: "Despite the implementation of various methods[...]" and then lists examples and ends in a semicolon, not continuing and leaving an incomplete sentence.



Sentence: "morbidity rates (IRs), and mortality rates (CFRs) in various regions of Indonesia" [LG3]

[LG3]: The abbreviations IR and CFR do not correspond with morbidity rates and mortality rates. If the abbreviations are not used thereafter, they are not required.

Sentence: "However, until now, a single health approach has not yet been realized by the community. [LG4]

[LG4]: Single health as in One Health?

<u>Sentence:</u> "Therefore, it is important to explore the factors that need to be considered when developing a single health [LG5] concept for mosquito-borne disease control, especially in Indonesia. Hopefully, this perspective can provide insights into understanding the essence of the One Health approach in an effort to accelerate the realization of the concept of mosquito-borne disease control and design effective strategies that consider the complex interactions of each predisposition to accelerate the eradication of these diseases in the future.:"[LG6]

[LG5]: Again, single health

[LG6]: This part is not very well written. Sometimes it uses single health instead of one health. The sentence, *Hopefully, this perspective can provide insights into understanding the essence...*, is a very long sentence that is difficult to understand. It does not convey a clear message. I suggest rewording and shortening this into 2-3 sentences instead.

Section: "Understanding the One Health Approach" [LG7]

[LG7]: This does not need to be a section; the paragraph can be included as a second paragraph connecting the first one in the introduction, as it is a very general description of what is One Health.

Section: "Interconnectedness of Human, Animal, and Environmental Health' [LG8]

[LG8]: The paragraph needs to be structured in a more organized manner.

<u>Sentence:</u> "To cause a disease, there must be a change in one of the cycles or elements contained in the One Health paradigm" [LG9]

[LG9]: This sentence is confusing and does not transmit a clear message. To cause a disease, you need 1) the infectious agent to be transmitted to a 2) susceptible host for it to develop the disease. I would suggest clarifying the sentence as it seems you may be talking about the transmission of disease rather than the cause of disease.

<u>Sentence:</u> "In addition, low human immunity or other disorders contribute to the easy introduction of viruses into the human body, which can cause disease." [LG10]

[LG10]: This sentence is slightly disconnected from the paragraph; you are talking about vectors and breeding sites, and now you mention human immunity and disease without a transition.

Sentence: "The interaction between humans and intermediate animals [LG11] has accelerated the spread of pathogens,



resulting in an increase in the incidence of environmental and mosquito-borne diseases in the community" [LG12].

[LG11]: What do you mean by intermediate animals? Depending on the mosquito-borne disease, animals do not act in the transmission cycles; for example, urban yellow fever transmits between humans. Dengue transmits between humans, and animals have little influence on the spread. This sentence should be reworded.

[LG12]: Incidence of environmental what?

<u>Sentence:</u> "The integration of veterinary surveillance and vaccination programs for livestock and the encouragement of animal health practices are necessary components of a One Health strategy (Negara et al., 2022)." [LG13]

[LG13]: This sentence seems disconnected, and the text does not transition adequately to this sentence.

<u>Sentence:</u> "In addition, providing knowledge, practices, and experiences in the field of green education is important for providing more comprehensive insights into the community to maintain the stability of one health element "[LG14]

[LG14] I recommend rephrasing this sentence and perhaps making it two separate sentences: What are you trying to say by providing practices and experiences? Do you mean improving practices in vector control? Engaging communities in vector control experiences? What is the "field of green education"? And what do you mean by the stability of one health element?

<u>Sentence:</u> "The communities closest to the source of the disease and governments providing policy must be able to embrace local languages and cultural beliefs and actively engage community leaders to ensure sustainable behavioral change" [LG15]

[LG15]: This sentence seems to say that the communities have the same responsibility as the governments, I suggest rephrasing to emphasize that the government is the one that must take the action; I would remove the communities from the beginning of the sentence.

<u>Sentence:</u> "In its application in Indonesia, it is imperative to synergize research and government agencies such as the National Innovation Research Agency (BRIN), the Ministry of Health, the Ministry of Agriculture, the Ministry of Environment and Forestry, and wildlife conservation agencies and universities to bridge research and innovation as well as policy coherence and coordinated actions for surveillance, early detection, rapid response, and development of comprehensive strategies in mosquito-borne disease control efforts and eradication plans." [LG16]

[LG16]: This is a very long sentence, I suggest splitting it into two

<u>Sentence:</u> "In addition, the One Health concept emphasizes interdisciplinary collaboration between various sectors, such as human health, animal health, environmental science, and policymaking" [LG17].

[LG17]: This sentence is repeated across the text, it is not needed here.

Figures: The image at the end is not referenced in the text. Is it supposed to be a graphical abstract? It should have



captioning and be referenced in the text where it belongs.

The image of the mosquito should have a copyright notice or state whether it is drawn using AI.