

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

#### Marika Grillini<sup>1</sup>

1 University of Padua

Potential competing interests: No potential competing interests to declare.

The submitted paper is a review article investigating the importance of a one-health approach for the control of mosquitoborne diseases in Indonesia.

The author aims to provide information on the one-health approach since the country still faces several challenges despite the use of various control methods.

The article gives food for thought on the implementation of the attention that policymakers should have, the strengthening of surveillance, monitoring and vector control systems, effective communication and collaboration, and the increase of infrastructure capacity and resource allocation.

In my opinion, the paper is sometimes repetitive, and the author tends to use the same words too often without replacing them with synonyms.

Rather than a review, this article seems like a prospective article to me, since the author didn't collect a real bibliography on what has already been done on the subject (e.g., presence and distribution of diseases in the country, prevalence, mosquito species, etc.) but a series of thoughts on what should be done to make Indonesia free from mosquito-borne diseases.

In my opinion, the paper needs to change the kind of article, and it needs improvement in the following aspects.

#### Introduction

- "Indonesia has faced significant vector control challenges, despite the implementation of various control methods, such as the mosquito nest eradication program (PSN), 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" Which ones are the "other vector eradication programs"?
- "Dengue virus infection, Zika virus infection, malaria, chikungunya, and other infections continue to be reported throughout the year" More likely "Dengue virus, Zika virus, malaria, chikungunya, and other infections continue to be reported throughout the year"
- "In view of this problem, various efforts have been made by the government, related sectors, and the community, one of which is adopting a comprehensive One Health" More likely "In view of this problem, various efforts have been made by the government, related sectors, and the community; among them, a comprehensive One Health paradigm has been



adopted as... "

## **Understanding the One Health Approach**

- "mosquitoes, humans, animals, and the environment" More likely "mosquitoes, humans, animals, and environment"
- "in an effort to maintain the stability of one health element" "In order to maintain the stability of one health element"

### Interconnectedness of Human, Animal, and Environmental Health

- "various intermediate animal species". Did the author mean "intermediate host" with "intermediate animal species"? If yes, I suggest adding the term "host."
- "The loss of natural breeding sites, a high number of artificial breeding sites, and a high number of unmaintained breeding pockets, accompanied by massive human activities in an effort to control vectors, have resulted in an increase in mosquito populations" more likely "The loss of natural breeding sites, a high number of artificial breeding sites, and a high number of unmaintained breeding pockets, accompanied by massive human activities in an effort to control vectors, has increased mosquito populations" to simplify the sentence.
- "This will certainly contribute to the explosion of vector populations, particularly mosquito populations, in the community" is a repetition, I suggest deleting. The author reported the same concept a few lines before.
- "low human immunity or other disorders contribute to...." I suggest using "immunity disorders" or even better "immunodeficiencies."
- "The interaction between humans and intermediate animals has accelerated the spread of pathogens". I suggest deleting the term "intermediate."
- "The resulting sylvatic cycles". I suggest deleting the term "resulting."

# Cross-sector collaboration and policy implementation

- The sentence "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" is too long, and a reader can miss the sense. Please rephrase.
- "...vector control efforts, which is one of the triggers for the increase in cases..." more likely "...vector control efforts, which leads to the increase in cases..."

#### Key focus areas for mosquito-borne disease control in Indonesia

- "The key areas of focus for..." more likely "The key points for..."
- "Strengthening this system requires a multidisciplinary approach, as the surveillance system in Indonesia is still limited.

  The availability of field personnel...." more likely "Strengthening this system requires a multidisciplinary approach; nevertheless, the surveillance system in Indonesia is still limited; indeed, the availability of field personnel...."

Qeios ID: 1QD2VO · https://doi.org/10.32388/1QD2VO



- "Integrating data from different sectors helps policymakers identify disease hotspots...." more likely "Integrating data from different sectors may help policymakers identify disease hotspots...."
- "...and the importance of diversifying approaches that facilitate community vector control." more likely "...and the importance of diversifying approaches for vector control" to avoid repetition and to keep it simpler.
- "Finally, infrastructure capacity building and resource allocation are considered" more likely "Finally, infrastructure capacity building and resource allocation need to be considered".
- "These key points should receive attention from relevant sectors to accelerate the eradication of mosquito-borne diseases in Indonesia" more likely "These key points should receive attention from relevant sectors to accelerate the eradication of these diseases in Indonesia" to avoid repetition.

#### Conclusion

• "...strengthening vector control strategies in various sectors..." I suggest deleting "in various sectors."

Qeios ID: 1QD2VO · https://doi.org/10.32388/1QD2VO