

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

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Potential competing interests: No potential competing interests to declare.

A very well drafted article on One health paradigm to control mosquito borne diseases.

The author has proposed a 'One Health paradigm' to control mosquito-borne infections in Indonesia. In theory, it appears ideal, but difficult to implement even in developed countries with all their resources. The author has pointed out the importance of strengthening vector surveillance and monitoring systems, as well as strengthening vector control strategies in addition to development of infrastructure and effective communication which are very important for mosquito-borne disease management.

Overall, the recommendations are ideal, but it is hypothetical as conditions vary with each country due to geographic conditions, rain fall, other man made conditions such as changed agricultural practices, unplanned developmental activities, callous attitude towards disposal of waste, etc. To control mosquito borne diseases in Indonesia, the author should really assess the ground realities critically and address each drawback/limitations. Indonesia is a vast country with different geographic and climatic zones and each zone needs to be assessed independently. Then only one can achieve at least one target. Take the case of dengue, the virus has spread to more than a 100 countries in the tropical and subtropical region and half the world's population is under its risk. Despite all the control measures taken, the number of dengue cases are increasing day by day and even developed countries are struggling to control the spread of the virus. Among the mosquito borne diseases, control of dengue vectors (*Aedes aegypti*, *Ae. albopictus* etc) differ from encephalitis transmitting mosquitoes such as *Culex*, *Mansonia* etc. Therefore, it is important to have different strategies to control different mosquitoes. If you use 'one shoe fits all' approach, it is impossible to control mosquito-borne virus outbreaks. Despite all the efforts, *Aedes aegypti* control still remains a dream.

Since Indonesia mainly suffers from *Aedes* mosquito-borne dengue and chikungunya, a more sustainable integrated program incorporating health workers, community, and governments is needed to bring the mosquito population within the threshold. Similarly, continuous monitoring of vector populations and early detection of virus infection cases is therefore necessary to contain outbreaks. The government and policymakers should strengthen mosquito surveillance and diagnostic facilities and should educate people about vector mosquitoes and their breeding habitats and the importance of source reduction. A change in attitude towards waste disposal is also important to reduce man-made breeding habitats for the mosquito.

