

Review of: "[Research Note] Dengue – Therapeutic Efforts in Mexico"

Ramos Ligonio Angel¹

¹ Universidad Veracruzana

Potential competing interests: No potential competing interests to declare.

The work provides some approaches to some therapeutic actions used in dengue virus infection, highlighting some of the metabolites present in plants and the effects that have been observed by the use of the aforementioned herbal remedies. It would be of great importance to emphasize why it is important to achieve an anti-cytokine effect, since as is known, the cytokine storm that accompanies the disease is involved in the processes of severe dengue that involves the extravasation of plasma, which gives rise to the characteristic hemorrhages observed in this dengue immunopathology.

The approach to biocontrol mechanisms for mosquitoes that transmit the dengue virus is another success of the work due to the safety that has been observed in the use of these control mechanisms since the use of pesticides generates long-term problems, such as resistance or its effect is simply not selective. On the other hand, the focus on the possible repositioning of drugs based on the findings in patients using metformin, with the aim of improving the lipophilicity of the aforementioned molecule and directly impacting its pharmacokinetic, pharmacodynamic and toxicological characteristics, is a good success of the written.

However, it is evident to discuss the need to carry out studies on the regulation mechanism exerted by the metabolites present in the herbal recipes used on the expression of these cytokines to generate a better understanding of the mechanism of action that is carried out and especially for the safer use of these remedies. Likewise, it is necessary to consider whether the use of biological control in relation to the selective pressure it generates could give rise to a possible adaptation of the vectors and generate other problems that have not yet been determined. Finally, with respect to the repositioning of drugs in dengue, it is vitally important to take into account the decrease in the generation of side effects, since, as is known, metformin and its derivatives induce diarrhea, nausea and stomach upset.