

LETTER TO THE EDITOR

Correspondence

In support of “Toxicity of herbal medications suggested as treatment for COVID-19: A narrative review”

The authors of the article entitled “Toxicity of herbal medications suggested as treatment for COVID-19: A narrative review” have recently read the letter to the editor that was written in response entitled “Antiviral Effects of Oleandrin” by R.A. Newman and K.J. Sastry. Although the research provided by these authors in their response is intriguing and may potentially lay the groundwork for future treatments of COVID-19 and other viruses, we believe the authors may have misconstrued the focus and scope of the original article.

The original article states multiple times that herbal medications, including the extract of the cardiac glycoside *Nerium oleander*, have been used successfully for centuries for the treatment and cure of many different diseases. We also stated multiple times in the original review that few clinical studies had been performed examining the efficacy of any of the herbal medications listed in the review, but there have been many anecdotal reports of successful treatment of COVID-19 using these herbal medications. We finally go on to state that the focus and scope of the review is to identify toxicities from herbal medications that are misused or used without the guidance of an experienced healthcare provider and explicitly comment that the review is not to examine the efficacy of any of the herbal preparations.

The authors of the response to the review quote the Father of Toxicology, Paracelsus, stating “only the dose makes the poison,” which is a sentiment the authors of the original review also share. A perfect example of this statement is provided by the authors of the response, when they highlight the potential toxicity of another cardiac glycoside, digoxin, despite it being used regularly in modern medicine. Digoxin toxicity has been well-researched and written about extensively for as long as it has been used as medicine, and its efficacy as treatment of disease has nothing to do with this potential toxicity. Therefore, although oleandrin may be safe at nanomolar concentrations, as suggested by the research provided in the previously mentioned response, it does not change the supplements’ potential toxicity. The reason it was included in the review was because consumption of oleandrin became a national news headline after Dr. Ben Carson endorsed using the product when he was infected with COVID-19. With such a newfound publicity, the authors of the original review were concerned that members of the general public, following the advice of Dr. Carson,

who is himself a retired pediatric neurosurgeon, would self-prescribe and self-administer oleandrin without the guidance of a healthcare provider. This would increase the risk that the product would be misused and used at the incorrect dose, resulting in toxicity.

Although the authors of the original article acknowledge that many of the herbal medications listed in the review may be efficacious in treating COVID-19, we also highlight many times that further studies need to be performed before suggesting these medications as treatment. The focus of the article was not to examine the efficacy of these medications, but instead to highlight their potential toxicity when misused or used at the incorrect dose. The potential efficacy of any of the herbal medications listed in the review does not change the concurrent potential toxicity of these same medications.

Michael A. DiPietro MD
Christopher Mondie DO

*Department of Emergency Medicine, Newark Beth Israel Medical Center,
Newark, New Jersey, USA*

Correspondence

Christopher Mondie, DO, Associate Professor, Department of
Emergency Medicine, Newark Beth Israel Medical Center, 201 Lyons
Avenue, Newark, NJ 07112, USA.

Email: christopher.mondie@rwjbh.org

See related article: Newman R, Jagannadha Sastry K. Antiviral effects of oleandrin. *JACEP Open*. 2021;e12469.
<https://doi.org/10.1002/emp2.12469>

REFERENCES

1. DiPietro MA, Mondie C. Toxicity of herbal medications suggested as treatment for COVID-19: a narrative review. *J Am Coll Emerg Physicians Open*. 2020;2(2):e12411.
2. Swan J. Trump eyes new unproven virus ‘cure’ promoted by Ben Carson and the CEO of MyPillow. *Axios*. Los Angeles, CA: Axios Newsletter; 2020.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2021 The Authors. *JACEP Open* published by Wiley Periodicals LLC on behalf of American College of Emergency Physicians