

## Review of: "The pros and cons of utilizing crude herbal preparations as opposed to purified active ingredients, with emphasis on the COVID pandemic"

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Potential competing interests: No potential competing interests to declare.

The work is very interesting, especially when it presents a new possibility of treating a little or nothing known virus, with a terrible pandemic.

In the introduction of the work, it cannot be said that the consumption of Artemis was safe for hundreds of years, since before there were no Pharmacovigilance Programs, or better, Phytovigilance programs, which are programs in charge of recording reactions. adversaries of medicines or medicinal plants.

However, I think that the use of Artemisa for the treatment of COVID seems very reckless to me due to the little or no evidence presented here.

The title of the work does not reflect its content. The title mentions "purified active ingredients" versus "crude herbal preparations", which is practically absent from the paper. In addition, the "limitations" are mentioned in the title, however, they do not appear in the research.

The methodology used should be better clarified and completed. First, mention what kind of study it is. Is it a literature review study? Is it a case study? It is a quasi-experimental study (where the same group serves as case and control and screening is done "before" and "after"????). What were the patient inclusion criteria? What other medications did COVID patients use? What could be the synergistic or antagonistic effects between them? What comorbidities did the patients present?

Second, the number of samples is low. It is not mentioned based on which sample calculation that figure was obtained.

Thirdly, the dose, quantity and under what forms the patients consumed Artemis are not described. It is mentioned in the work as an infusion and for inhalation. Did all the patients use it in the same way or only some? Where do we get the Artemis? Are you sure they are the correct genus and species?

The results should be presented in tables. A table with the characteristics of the population studied in terms of sociodemographic variables: age, sex, etc.

A second table with the "clinical" characteristics of the patients, and how they used the Artemisa. In the article he mentions "a few" what does he mean? Is it one, two or three? Is a few the same amount for all?



Statistical tests would be desirable to see if the differences found really exist or are due to chance.

It would be very interesting to clarify how they handled the so-called "confounding variables". The improvement of the patients could be due to a spontaneous remission of the disease and not to the effects of Artemis.

It is clarified that there is another publication where these aspects mentioned above may be presented. However, the objective of this research is not very clear since it gives the impression that part of the results is presented but without mentioning and clarifying methodological aspects that are important and necessary for it to have internal validity.