

Review of: "Efficacy of *Anogeissus leiocarpus* as a Therapeutic Agent for Some Pathogenic Bacteria"

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Potential competing interests: No potential competing interests to declare.

The manuscript examines the folkloric potential of the leaf extract of *Anogeissus leiocarpus* and is aimed at the effectiveness for possible treatment of infections caused by some pathogenic bacteria. The manuscript needs to be checked to avoid grammatical errors. This work is a good attempt to understand the potential of *Anogeissus leiocarpus* for antimicrobial activity.

- In the statement, "In 2013, the World Health Organization (WHO) stated that infections killed 61.7 per cent of the 9.6 million people who died in Sub-Saharan Africa",

61.7 per cent of the 9.6 million people who died of what? Please complete the sentence.

- Organisms that cause respiratory infections such as *Staphylococcus aureus*, *Streptococcus pneumoniae* as well

The sentence needs to be rewritten to make it clearer.

- "The majority of urban and rural dwellers are extremely in the practice of using the accessible and available herbal remedies within their localities in combating diseases. This type of practice has become phenomenal; hence, herbal plants have bioactive compounds that can be effective in disease management (Akharaiyi and Okafor, 2021)"

It is unclear what point the authors are trying to make. Please rewrite to make it clearer.

1. In the second last paragraph of the introduction, please specify in the treatment of which diseases, which bacterial disease/s.
2. This paragraph can be made more specific, which will also help highlight the importance and impact of the work being done.
3. "The purpose of the work is to determine the effectiveness of the plant extracts for possible treatment of infections caused by some pathogenic bacteria."

Specify what kind of infection and extract from which part of the plant.

4. How were the impacts of impurities dealt with while performing the quantitative phytochemical analysis? Also, it is not clear how the quantitative tests were performed. For example, the steroid determination is more of a qualitative

analysis.

5. When the authors are performing any tests, they need to specify the rationale for the tests. For example, what is the objective of the assay tests for their study?
6. “The chemicals screened from the leaf extracts qualitatively and quantitatively are flavonoids, steroids, alkaloids, terpenoids, tannins, phenol, and glycoside, which were not present in the aqueous extract qualitatively”

The sentence is not clear.

7. Why were the quantity and quality of phytochemicals more in the ethanol extract? And what do the authors mean by quality in this sentence?
8. What was the control used while performing antimicrobial tests? Is there any comparison with the control?
9. The discussion section seems too generic; the authors are not discussing why one or the other result is justifiable. For example, in the case of the higher activity of the ethanol extract, was it any of the phytochemicals that was making it highly active? Otherwise, ethanol itself has some antimicrobial properties; it can be due to the effect of ethanol rather than the plant extract.
10. Why were the individual phytochemicals from the plant extract not used for the antimicrobial tests? When using the whole extract, it is difficult to conclude which component of the extract was more effective.