

Review of: "Evaluation of Ambient Air Quality Levels at Various Locations within Lead City University, Ibadan"

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Potential competing interests: No potential competing interests to declare.

This article focuses on the assessment of ambient air quality levels at different locations within Lead City University, Ibadan, Nigeria. The article mentions the measurements of parameters such as temperature, carbon dioxide concentration, carbon monoxide concentration, and particulate matter concentration at different locations. Overall, the relative humidity levels in the morning and afternoon were within the comfortable range, while the carbon dioxide concentration and particulate matter concentration were measured above the World Health Organization guideline at some locations. These results are important for understanding the environmental conditions in the region and for making relevant decisions. There are some shortcomings in the article, which are described below:

1 The study was limited by resources and time to collect air quality data in every area or location of the University. As a result, the selected sampling sites may not be fully representative of the entire campus, which limits the generalizability of the results to other regions.

2 Although the article provides data on temperature, relative humidity, carbon dioxide, carbon monoxide, and particulate matter concentrations at different locations, it does not delve into the specific causes of the volatility of these parameters, especially the anomalously high values seen at certain locations, such as location 13 (the landfill), and does not further analyze the causes.

3 The Results section of the article is not sufficiently discussed in depth; for example, the values are not clearly labeled in the Figure.1 and Figure.2 data charts.

4 Due to limitations in the timing of data collection and the number of sampling sites, the study may not have adequately captured changes in air quality over a longer period of time or within a wider range of locations. Future studies will need to overcome these temporal limitations in order to gain a more complete understanding of air quality levels on campus.

5 While it was mentioned that participant consent was obtained and ethical approvals were followed, the article was rather brief in describing how participant privacy and data confidentiality were ensured and the specific security measures taken during the study.

6 All of the bar charts in the text suffer from the problem of one data point being too large while other data levels do not compare as well, and it is recommended that the bar charts be improved.

7 The manuscript proposed recommendations for improving air quality management strategies based on the research but

did not elaborate on specific strategy elements or assess the feasibility or potential effectiveness of these strategies.

8 Although it mentioned that correlation analyses could be used to examine relationships between air pollutants, the manuscript itself did not show the results of these analyses or provide specific information on how different pollutants interact or affect air quality.

In summary, our opinion is: major revision.