# Review of: "Thermal Comfort Temperature Evaluation in Hospital Wards for Patient Safety and Climate Change Sustainability"

Darya Gachkar[1]

1 Universidad de Sevilla

Potential competing interests: No potential competing interests to declare.

The abstract is informative, but it could benefit from being more concise. Try to streamline sentences for clarity and brevity.

- Also, emphasize the link between thermal comfort and patient safety, as the title suggests. How does the evaluation of thermal comfort in hospital wards relate to patient well-being and safety?

The introduction covers a broad range of topics, including sustainable construction, green building practices, and corporate governance and corporate citizenship (CGCC). Consider streamlining the content and ensuring a more focused transition between these subjects.

- The transition from discussing CGCC to hospital design is abrupt. Consider providing a smoother transition or a brief rationale for shifting focus to hospital design in hot climates.
- Highlight why designing comfortable hospitals in dry hot climates is a critical aspect. Discuss the unique challenges and the relevance of the study's focus on passively ventilated closets.
- Provide a clearer link between the theoretical studies on urban heat mentioned and the specific focus on hospital design. How do these broader studies inform the current research on passively ventilated closets?

In the methodology here are some comments and suggestions for improvement:

- Clarify the process of model development, including the data collection period from January 2021 to March 2022. Explain the criteria for selecting the three distinct wards and the nursing station for the installation of temperature control devices.
- Clearly outline the data analysis methods, including the calculation of surface albedo, actual sunshine hours ratio, wind speed, and relative humidity. Explain the purpose and significance of the sensitivity analysis conducted on June 10, 2022, based on data from the Baghdad Weather Station.
- Describe the data linkage process and how data collected from the field were processed using a Hewlett Packard 9845 B computer. Highlight the importance of hourly data output in understanding the dynamic changes in environmental conditions.

For results and discussion, clarify the significance of measuring wind speed using the sensitive anemometer. Provide

more details on the reactive analyses conducted to understand how air characteristics change with temperature.

Enhance the conclusion section by incorporating the following suggestions:

- Stress the crucial role of building management in addressing heat-related challenges. Elaborate on specific strategies or interventions that have proven effective in maintaining a comfortable workplace environment.
- Discuss the significance of utilizing natural light to enhance the workplace environment. Explore the dual role of surrounding vegetation in both evaporative cooling and providing shade, contributing to a cooler atmosphere.
- Expand on the variables used in the sensitivity analysis and how small (5%) changes in these variables contribute to accurate predictions of future air temperatures.
- Clarify the relevance of the criteria for overheating in the context of the hospital and how it aligns with Lomas et al.'s considerations.
- Discuss the challenges faced in maintaining temperature equilibrium, especially when the nurse's station lacks electricity.