

Review of: ""Hospital's Thermo-neutral Zone for Patient Safety and Climate Change Sustainability"

Alireza Karimi¹

1 Universidad de Sevilla

Potential competing interests: No potential competing interests to declare.

Could you provide more details about the specific shortcomings in Iraq's construction design that affect the quality of the direct heat recovery system? Are there specific examples or case studies to illustrate these issues?

The reference temperatures mentioned (26.6°C minimum and 38.6°C average air temperature) seem crucial for understanding the context, but how do these values relate to the overall evaluation of the direct heat recovery system? Can you elaborate on their significance and how they impact thermal comfort?

While it is mentioned that there is a lack of electricity in Iraqi cities, how does this specifically impact the mechanical cooling of buildings, and how does it relate to the effectiveness of the direct heat recovery system? Are there alternative solutions considered in the article?

The claim that the methodology can generate precise forecasts of forthcoming air temperatures using variables as little as 5 percent is intriguing. Can you provide more information on the variables used and their reliability? How do these forecasts contribute to the overall assessment of thermal comfort?

The standardized methodology for evaluating thermal comfort is discussed, but could you provide more information about the methodology itself? What specific criteria or parameters are considered in the evaluation, and how are they measured or assessed?

The paper mentions the analysis of hybrid ventilation systems at Kadhimiya Teaching Hospital. Could you provide more details on the findings of this analysis and how they contribute to the broader understanding of thermal comfort in the field?

The suggestion to add fans to military fortifications in Iraq is presented as a cost-effective method. Can you elaborate on the evidence or studies supporting this claim? How does this solution compare to other potential strategies for improving resistance to extreme heat?

The statement that the established method is significantly more useful in evaluating the thermal comfort of buildings in Iraq's current and future climates raises questions about the comparison with other methods. What specific advantages does the established method offer, and how does it address the unique challenges posed by Iraq's climate?

Are there any limitations or potential biases in the study that should be acknowledged? For instance, how generalizable



are the findings to different regions or building types within Iraq?

Lastly, how does the proposed standardized methodology and the study's findings contribute to the existing body of knowledge on climate-responsive building design and thermal comfort in warm climates? What gaps in the literature does this research aim to address?