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Reply to Letter to the Editor: "HADS-A in White Coat Hypertension: Limitations and Future Directions"

LETTER TO THE EDITOR
REPLY

To the Editor;

Sincere gratitude is expressed for the thoughtful and comprehensive feedback on the manuscript entitled "A Metric Shedding Light on the Relationship Between White Coat Hypertension and Anxiety: The Hospital Anxiety and Depression Scale-Anxiety."[1] The opportunity to address the important points[2] that were raised is greatly appreciated. Please find below the responses to the specific comments and suggestions that were provided.

The comment regarding the exclusion of patients with previously diagnosed anxiety disorders is appreciated. This study aimed to explore the relationship between white coat hypertension (WCH) and subclinical anxiety symptoms, rather than pre-existing psychiatric conditions, which could introduce confounding due to chronicity, medication use, and severity. To achieve this, the validated Hospital Anxiety and Depression Scale-Anxiety (HADS-A) was used to assess anxiety in a standardized way. Including individuals with known psychiatric diagnoses or psychotropic medication use might have limited the ability to interpret the independent role of anxiety symptoms in WCH. It is fully agreed that comorbid anxiety is clinically relevant in hypertensive populations. Future studies with broader inclusion criteria and multivariate analyses would help further clarify the complex interaction between anxiety disorders and WCH in routine clinical settings.

While it is acknowledged that the cross-sectional nature of the study limits causal inference, this design allowed us to systematically evaluate the association between anxiety levels and WCH using a validated psychometric tool (HADS-A) for the first time in this context. In this regard, this study provides a valuable contribution to the existing literature and offers a foundation for future research in this area. The primary aim was not to establish causality but to identify whether subclinical anxiety symptoms are associated with WCH in a real-world outpatient setting. Within this framework, the findings—consistent with clinical observations and supported by current literature—demonstrate a meaningful association between elevated anxiety scores and WCH. It is agreed that longitudinal studies, including repeated psychological and hemodynamic assessments, could provide a clearer understanding of the temporal relationship between anxiety and blood pressure fluctuations. Nevertheless, it is believed that this study fills an important methodological gap by demonstrating the feasibility and clinical relevance of using standardized psychometric evaluation in WCH research—offering an important first step toward understanding the complex interplay between anxiety and blood pressure in clinical settings.

The reviewer's insightful comments regarding the clinical interpretation of the statistically significant difference in HADS-A scores between the WCH and sustained hypertension groups is sincerely appreciated. It is acknowledged that the specificity of a HADS-A cutoff value >6 is relatively modest (53.6%), and it is agreed that this may limit its diagnostic utility when considered in isolation. However, it is believed that this does not diminish the relevance of the findings. The difference in mean HADS-A scores observed in this study (9.0 ± 2.9 vs.

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6.6 ± 2.6, $P < .001$) points to a consistent and statistically robust association, suggesting a psychological distinction between patients with white coat hypertension and those with sustained hypertension. It is recognized that there is considerable overlap in anxiety scores; nonetheless, it is felt that the magnitude of the difference supports the notion that anxiety may play a more prominent role in WCH. It is important to clarify that the intent was not to use HADS-A as a diagnostic criterion for WCH, but rather to explore whether anxiety levels, as measured by a validated psychometric tool, differ meaningfully between these patient groups. From this perspective, these findings contribute to the understanding of WCH by highlighting the potential relevance of psychological factors even in patients without a formal psychiatric diagnosis. As you have pointed out, a relevant aspect to consider is the potential influence of socioeconomic stress and chronic disease burden as confounding factors. It is fully agreed that these factors can influence both psychological well-being and blood pressure regulation. Although attempts were made to mitigate potential confounding by including only patients without prior antihypertensive treatment or known psychiatric conditions, it is acknowledged that not accounting for variables such as socioeconomic status, occupational stress, or comorbid conditions is a limitation of this study. This thoughtful observation is appreciated and it is agreed that future research incorporating these variables through multivariate modeling would provide a more comprehensive understanding of the complex interactions at play.

Overall, while this study has certain limitations, it is believed that it serves as a valuable starting point that underscores the potential link between elevated anxiety levels and WCH. The hope is that these findings will stimulate further research in this area and help inform more holistic approaches to the assessment and management of patients with elevated office blood pressure.

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