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Letter to the Editor

Letter to the Editor Regarding Manuscript on "Clinical Characteristics of Children with Acute Post-Streptococcal Glomerulonephritis and the Re-Evaluation of Patients with Artificial Intelligence"

"Akut Post-Streptokokal Glomerülonefritli Çocukların Klinik Özellikleri ve Hastaların Yapay Zeka ile Yeniden Değerlendirilmesi" konulu makaleyle ilgili Editöre Mektup

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Dear Editor,

The publication on "Clinical Characteristics of Children with Acute Post-Streptococcal Glomerulonephritis (APSGN) and the Re-Evaluation of Patients with Artificial Intelligence" [1]. The study on the use of ChatGPT 3.5 for APSGN patient follow-up is a fascinating example of the fusion of clinical medicine with artificial intelligence (AI). However, the information is worth analyzing critically, especially in light of the methodology and limited sample size. There are questions regarding the generalizability of the data given that only 11 patients were included. Robust statistical analysis that would have provided weight to the results and clarified whether the accuracy of ChatGPT's responses connected with certain patient outcomes or demographics appears to be missing from the study. In addition, it seems that ChatGPT queries are only asking about known information, not about the intricacies of specific cases or clinical circumstances that require real-time decision-making. The practical usability of AI in dynamic clinical situations is questioned by this shortcoming.

Furthermore, although the researchers claimed that every response pertaining to APSGN was accurate, the criteria used to determine response accuracy. Researchers that employ subjective evaluation in place of objective grading risk creating bias and cast doubt on the validity of their findings. More openness is also needed when it comes to clinical traits extracted from patient data and the choice of whether to offer treatment suggestions based on these traits. What precise criteria or clinical parameters were applied by the researchers to inform the AI model? In addition, were there any differences in the treatment choices made by the physicians and the AI's suggestions, and if so, how were they resolved?

This study provides opportunities for further research, especially in the area of larger dataset exploration, which

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may enhance the validity of AI applications in clinical settings. Longitudinal studies including several health facilities could shed light on the predictive power of AI across a range of demographics. In addition, future research should investigate whether AI can interpret real-time patient reactions or more complex clinical data to enable real-time treatment adjustments. Furthermore, incorporating AI into clinical decision support systems may significantly improve patient care.

In terms of novelty, future research might focus on creating specialized AI systems designed to more accurately analyze complicated cases of APSGN or other related nephropathies. It may be possible to identify trends that human clinicians may not always notice by integrating machine learning models that adjust in response to real-time patient data. Additionally, research could examine how AI can be integrated into interdisciplinary teams with the goal of utilizing both the analytical powers of AI and the practical experience of healthcare experts. In conclusion, this partnership might improve patient outcomes and simplify follow-up for APSGN and related disorders.

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