



doi • 10.5578/tt.20250311430
Tuberk Toraks 2025;73(3):233-234
Received: 07.08.2025 • Accepted: 13.08.2025

LETTER TO THE EDITOR

Investigating the effectiveness of non-polysomnography diagnostic methods used in sleep disorders in predicting the diagnosis of obstructive sleep apnea syndrome

Kübra GÜNGÖR¹(ID)
Banu GÜLBAY²(ID)
Turan ACICAN²(ID)

¹ Clinic of Chest Diseases, Ankara Bilkent City Hospital, Ankara, Türkiye
² Department of Chest Diseases, Ankara University Faculty of Medicine, Ankara, Türkiye

Cite this article as: Güngör K, Gülbay B, Acican T. Investigating the effectiveness of non-polysomnography diagnostic methods used in sleep disorders in predicting the diagnosis of obstructive sleep apnea syndrome. *Tuberk Toraks* 2025;73(3):233-234.

Address for Correspondence

Dr. Kübra GÜNGÖR
Clinic of Chest Diseases,
Ankara Bilkent City Hospital
ANKARA-TÜRKİYE
e-mail: kubraturkel@gmail.com

This is an open-access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution, and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes (<http://creativecommons.org/licenses/by-nc/4.0/>).

Data Sharing Statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

©Copyright 2025 by Tuberculosis and Thorax.
Available online at www.tuberktoraks.org

To the Editor,

We appreciate the interest shown by the authors regarding our article, “Investigating the effectiveness of non-polysomnography diagnostic methods used in sleep disorders in predicting the diagnosis of obstructive sleep apnea syndrome” (1). We welcome the opportunity to address the points raised and clarify certain aspects of our methodology and interpretations.

First, regarding the concern of selection bias due to our study population being drawn from a tertiary care center, we acknowledge that such settings often present with a higher pre-test probability for obstructive sleep apnea syndrome (OSAS). However, this reflects a realistic and clinically relevant population in which screening questionnaires are frequently applied in our national context. The aim of our study was not to generalize to the entire primary care population but to evaluate the performance of non-polysomnography (non-PSG) methods among suspected cases with suspected PSG indications. We share the view that multicenter studies involving more heterogeneous and community-based sample groups will provide stronger external validity for future research.

Regarding the performance of the Epworth Sleepiness Scale (ESS), we concur with the observation that its subjective nature

and overlap with other sleep disorders may affect its specificity. While our primary focus was on comparing the sensitivity of the questionnaires, we appreciate the suggestion to expand the discussion on specificity, predictive values, and the known limitations of ESS. Future analyses will incorporate these additional diagnostic parameters to provide a more comprehensive evaluation (2-4).

We also agree with the assessments made about the limitations of the Berlin Questionnaire (BQ) in clinical practice. Although BQ performed less well than STOP-BANG in our study, its use in everyday practice may be limited due to its more time-consuming nature and low specificity rates. The stated rates of sensitivity and specificity reflect the variations seen in different populations and demonstrate the importance of standardization of screening tools (5).

Regarding STOP-BANG, the issue of balance between sensitivity and specificity is an important point. In our study, the highest concordance rate was observed between STOP-BANG and PSG, and our clinical aim was to identify patients at high risk for the indication of PSG rather than to make a definitive diagnosis. This is in line with the principle of “not overlooking possible cases”, which is the main objective of screening, and does not eliminate the need for verification with PSG. The addition of advanced diagnostic performance indicators, such as AUC-ROC analyses, will be one of the goals of future studies.

The reason why new alternatives such as NoSAS or OSA-50 were not included in our study is that these tools were not widely used in the population of our country during our study period. Although home sleep apnea testing is an important alternative in

the clinic, our study focused only on questionnaire-based methods. These tools are increasingly being used, especially in environments where PSG access is limited, and their inclusion in future research will provide valuable data.

Finally, although we did not present a rigorous diagnostic algorithm in this study, our findings support the integration of STOP-BANG as a triage tool with the aim of more efficient use of PSG resources in high-risk patient groups. The authors' constructive criticism has made significant contributions to the development of our study. It is aimed to continue our research to increase the accessibility and effectiveness of OSAS screening methods with comparative and multicenter studies involving more diverse populations.

REFERENCES

1. Güngör K, Gülbay B, Acıcan T. Investigating the effectiveness of non-polysomnography diagnostic methods used in sleep disorders in predicting the diagnosis of obstructive sleep apnea syndrome. *Tuberk Toraks* 2025; 73(2): 102-11. <https://doi.org/10.5578/tt.2025021111>
2. Johns MW. A new method for measuring daytime sleepiness: The Epworth sleepiness scale. *Sleep* 1991; 14(6): 540-5. <https://doi.org/10.1093/sleep/14.6.540>
3. Chervin RD. Epworth sleepiness scale? Don't doze through this one. *Sleep Med* 2003; 4(2): 121-3. [https://doi.org/10.1016/S1389-9457\(03\)00030-3](https://doi.org/10.1016/S1389-9457(03)00030-3)
4. Silva GE, An MW, Goodwin JL, Shahar E, Redline S, Resnick H, et al. Long-term outcomes of daytime sleepiness in community-dwelling adults: The sleep heart health study. *Sleep* 2014; 37(3): 455-62.
5. Netzer NC, Stoohs RA, Netzer CM, Clark K, Strohl KP. Using the Berlin Questionnaire to identify patients at risk for the sleep apnea syndrome. *Ann Intern Med* 1999; 131(7): 485-91. <https://doi.org/10.7326/0003-4819-131-7-199910050-00002>