

Letter to the Editor

# My Concerns About the Article "Risk Factors and Severity Indicators of Female Pelvic Organ Prolapse: Insights From A Comprehensive Retrospective Study With A Large Sample Size". 2024; 51, 280

Mücahit Furkan Balci<sup>1,\*</sup>, İbrahim Karaca<sup>2</sup>

Academic Editor: Michael H. Dahan

Submitted: 9 February 2025 Accepted: 6 August 2025 Published: 30 November 2025

I have read the article "Risk Factors and Severity Indicators of Female Pelvic Organ Prolapse: Insights from a Comprehensive Retrospective Study with a Large Sample Size" with great interest. However, I would like to share several concerns regarding the methodology and interpretation of the results.

First, in exploring the risk factors associated with varying degrees of vaginal wall prolapse, the authors compared Stage I prolapse with the other stages (II, III, IV). To obtain a more accurate and objective classification, I suggest that stages be categorized according to the hymen level and grouped as Stage 1–2 and Stage 3–4. This approach is preferred because management and follow-up differ notably for Stage II, III, and IV prolapse [1–4]. In addition, combining Grade II/III/IV into a single category may obscure distinctions between the severity levels. More robust results could be achieved by applying ordinal regression or trend tests to better evaluate gradations in severity.

Second, regarding the statistical analyses, multiple regression models that include more than ten variables can increase the risk of Type I errors (false positives). To address this, methods such as the Bonferroni correction should be considered to adjust the significance threshold (e.g.,  $\alpha =$ 0.005). Moreover, while the authors report significant pvalues (e.g.,  $\chi^2 = 437.6$ ), the corresponding effect size (e.g., odds ratio) is not provided. To reflect clinical relevance, measures such as Cramer's V, odds ratio (OR), or relative risk (RR) should be included. Additionally, the relationship between vaginal delivery and prolapse might be confounded by factors such as age or parity; therefore, a multivariable logistic regression analysis would be more appropriate. Another related concern is that although a family history was shown to be statistically significant (p = 0.002), the number of positive cases was relatively low (108 vs. 258), suggesting a small effect size that may not have substantial clinical implications.

In summary, employing multiple comparison corrections is essential to minimize the risk of false-positives, and controlling for confounding factors via multivariable analysis is crucial. Including effect size metrics (e.g., OR, RR)

can highlight clinical significance, and any missing data should be addressed through multiple imputation followed by repeated analyses. Finally, interpreting results in their clinical context is important for distinguishing genuine clinical effects from merely statistically significant findings.

## **Author Contributions**

MFB: Conceptualized and drafted this critique letter, performed the methodological and statistical evaluations (including the proposed staging classification, Type I error analysis, Bonferroni correction, effect size considerations, etc.), and wrote the original draft. IK: Critically revised the manuscript for important intellectual content, provided significant feedback, approved the final version, and supervised the process. Both authors read and approved the final manuscript. Both authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

# **Ethics Approval and Consent to Participate**

Not applicable.

### Acknowledgment

Not applicable.

# **Funding**

This research received no external funding.

### **Conflict of Interest**

The authors declare no conflict of interest.

### References

- [1] Maher C, Feiner B, Baessler K, Schmid C. Surgical management of pelvic organ prolapse in women. The Cochrane Database of Systematic Reviews. 2013; CD004014. https://doi.org/10.1002/14651858.CD004014.pub5.
- [2] Bump RC, Mattiasson A, Bø K, Brubaker LP, DeLancey JO, Klarskov P, et al. The standardization of terminology of fe-

<sup>&</sup>lt;sup>1</sup>Department of Gynecology and Obstetrics, Torbalı State Hospital, 35860 İzmir, Turkey

<sup>&</sup>lt;sup>2</sup>Department of Gynaecology and Obstetrics, Bakırçay University Çiğli Training and Research Hospital, 35620 İzmir, Turkey

<sup>\*</sup>Correspondence: mucahitfurkanbalci@gmail.com (Mücahit Furkan Balci)

- male pelvic organ prolapse and pelvic floor dysfunction. American Journal of Obstetrics and Gynecology. 1996; 175: 10–17. https://doi.org/10.1016/s0002-9378(96)70243-0.
- [3] Jelovsek JE, Maher C, Barber MD. Pelvic organ prolapse. Lancet (London, England). 2007; 369: 1027–1038. https://do
- i.org/10.1016/S0140-6736(07)60462-0.
- [4] Choi KH, Hong JY. Management of pelvic organ prolapse. Korean Journal of Urology. 2014; 55: 693–702. https://doi.org/10.4111/kju.2014.55.11.693.

