



Letter to the editor regarding “longitudinal perioperative pain, neuromusculoskeletal complications and quality-of-life assessment in partial parotidectomy”

Fatih Özden¹

Received: 13 September 2020 / Accepted: 20 September 2020
© Springer-Verlag GmbH Germany, part of Springer Nature 2020

I read the article with great interest by Ozsoy-Unubol et al. entitled “Longitudinal perioperative pain, neuromusculoskeletal complications and quality-of-life assessment in partial parotidectomy”. They purposed to assess the neurological, physical, psychological problems and health-related quality of life in patients with benign parotid tumors before and after surgery (1st week and 1st month) [1]. While I believe the authors have made a considerable contribution to this study, there are some concerns that I would like to address especially related to methodological issues.

First, the authors evaluated the patients’ neck pain levels on a numerical rating scale (NRS-11) between 0–10. They grouped the patients with pain score belonging to NRS-11 assessment as 0 (no pain), those with pain levels between 1 and 3, and ≥ 4 , according to the method of reference number 7. The mentioned reference has no methodological information about these cut-off values. They only analyzed the Mann–Whitney *U* test between groups of these pain group values. However, when determining the cut-off values, statistical analyzes should be made using different methodological choices for the relevant sample and assessment method. One of these is the significance analysis. The cutoff values should be analyzed with the likelihood ratio test, the maximum area under the curve (AUC), or receiver operating characteristic (ROC). Optimal cut-off values should be determined according to the results of these analyses [2].

Second, the Turkish version and cultural adaptation of the Facial Disability Index (FDI) was published in 2020.

Presumably, in 2019, when researchers began their studies, they were unable to access this survey due to publication time mismatch. It has been emphasized that while using such PROs the items must not only be translated well linguistically but also must be adapted culturally to maintain the content validity of the instrument with the permission. This is an important procedure for the level of evidence of the study [3].

Last but not least, the study was carried out with only 20 cases. Altman recommended at least 50 subjects in a methods comparison study [4]. It is also emphasized that assessment duration and treatment interactions are important criteria in determining sample size, especially for longitudinal studies using repeated measures [5]. The explanation of power analysis, which the authors did not specify in the method section, also will provide essential information on the effectiveness of the study.

I would welcome the comments of the authors to address these issues, which will further provide additional information about their study.

Acknowledgements None.

Funding None.

Compliance with ethical standards

Conflict of interest The authors report no conflicts of interest and certify that no funding has been received for this study and/or preparation of this manuscript.

This comment refers to the article available online at <https://doi.org/10.1007/s00405-020-06241-y>.

✉ Fatih Özden
fatihozden@mu.edu.tr

¹ Köyceğiz Vocational School of Health Services, Elderly Care Department, Muğla Sıtkı Koçman University, Köyceğiz SHMYO, 48800 Köyceğiz, Muğla, Turkey

References

1. Ozsoy-Unubol T, Bulgurcu S, Erkul BE (2020) Longitudinal perioperative pain, neuromusculoskeletal complications and quality-of-life assessment in partial parotidectomy. *Eur Arch Otorhinolaryngol*. <https://doi.org/10.1007/s00405-020-06241-y>

2. Chang C, Hsieh MK, Chang WY, Chiang AJ, Chen J (2017) Determining the optimal number and location of cutoff points with application to data of cervical cancer. *PLoS ONE* 27(12):e0176231
3. Özden F, Karaman ÖN, Tuğay N, Savaş Ö, Sözen T, Üçüncü H (2020) The reliability and validity of the Turkish version of the facial disability index. *Disabil Rehabil.* <https://doi.org/10.1080/09638288.2020.1762768>
4. Altman DG (1991) *Practical statistics for medical research.* Chapman and Hall, London
5. Guo Y, Logan HL, Glueck DH, Muller KE (2013) Selecting a sample size for studies with repeated measures. *BMC Med Res Methodol* 1(13):1–8

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.