LETTER TO THE EDITOR

Authors' response: development and validation of a questionnaire to evaluate infection control in oral radiology—consistent statistical analyses and methodology

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To the Editor,

We thank Dr Saeid Safiri and Dr Erfan Ayubi for their interest in our article,¹ entitled *Development and validation of a questionnaire to evaluate infection control in oral radiology*, which is published in *Dentomaxillofac Radiol* with ID 20160338. These colleagues have questioned some aspects of our article using three of their own letters to the editor as references.

As described in the Methods and materials section, our study was performed in five steps following the methodology advocated by the literature: (1) literature review; (2) generation of items and domains; (3) content validity; (4) pre-test; and (5) establishment of psychometric properties.^{2–4} We made a point to work with standardized and scientifically accepted methodology.

As was also reported in the Methods and materials section, we used five different databases in our study, one for each step. In an attempt to better understand our colleagues' suggestion, we searched the PubMed database for citations they referenced in their response to our article which were, in fact, their own letters to the editor, which cited others' letters to the editor from many different journals. We continued our search and we found one letter⁵ by our colleagues that cited a validation study performed by other authors. This study validated a summarized version of an instrument tested on a sample from another population,⁶ as the authors of the original version of the instrument used a single sample.⁷ We also encourage other authors to translate and validate our instrument

for use on other populations, as in the case of the article cited by our colleagues in one of their letters to the editor.

With regard to the question regarding the factor analysis, a careful reading of our results will show that it was not only Factor 1 that had an eigenvalue >1, but Factors 1–10, for a total of 69.5% of the total variance. Factor 1 alone was responsible for 23.8% (eigenvalue = 9.51).¹ The literature states only that the eigenvalue must be >1 in the factor analysis and does not mention the maximum value for this parameter.

Furthermore, we do not believe that a confirmatory factor analysis is necessary because we obtained enough good values for the psychometric measurements, a result which itself confirms the consistency and coherence of the instrument.

Therefore, we are confident that our results are supported by consistent statistical analyses and methods. We do not believe any additional approaches are necessary to validate the questionnaire proposed herein.

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