

## LETTER TO THE EDITOR

# Letter to the Editor: "Use of nitrous oxide sedation by pediatric dentists"

Fatima Ezzahra Zidane<sup>1,\*</sup>, Soukaina Rouijel<sup>1</sup>

<sup>1</sup>International Faculty of Dental Medicine, Health Sciences Research Center (CReSS), College of Health Sciences, International University of Rabat, 11100 Rabat, Morocco

**\*Correspondence**[fatima-ezzahra.zidane@uir.ac.ma](mailto:fatima-ezzahra.zidane@uir.ac.ma) (Fatima Ezzahra Zidane)**Keywords**

Nitrous oxide sedation; Pediatric dentistry; Clinical practice; Dental anxiety

We read with interest the article entitled "Use of nitrous oxide sedation by pediatric dentists", published in the Journal of Clinical Pediatric Dentistry [1]. The authors should be commended for addressing a clinically relevant topic, as nitrous oxide/oxygen inhalation sedation remains one of the most widely used behavior guidance techniques in pediatric dental practice.

The study provides useful insight into current patterns of nitrous oxide utilization among pediatric dentists. However, several methodological and clinical considerations merit further discussion. First, the reliance on self-reported data may introduce reporting bias and social desirability bias, particularly regarding adherence to sedation protocols and safety monitoring standards. Previous literature has shown that self-reported compliance with sedation guidelines does not always reflect actual clinical practice [2]. The inclusion of objective measures, such as clinical audits or institutional records, could enhance the robustness of future studies.

Second, while the predictive model proposed by the authors is of interest, its generalizability remains uncertain. Pediatric dental sedation practices vary widely across healthcare systems due to differences in training requirements, legal regulations, and availability of sedation facilities [2]. Without external validation in diverse practice settings, the applicability of the model beyond the study population may be limited.

In addition, closer alignment with established international guidelines would further enrich the discussion. Current recommendations emphasize strict patient selection, adequate practitioner training, and continuous monitoring when administering nitrous oxide sedation in children [3]. A direct comparison between reported practices and these guideline-based standards could help identify potential gaps between evidence-based recommendations and real-world application.

Finally, the absence of a focused analysis of children with special healthcare needs represents a limitation. This population often presents with increased behavioral and medical complexity, for whom sedation-related decision-making and risk-benefit assessment may differ substantially from those of

healthy pediatric patients.

Overall, this study contributes meaningfully to the literature on pediatric dental sedation.

**AVAILABILITY OF DATA AND MATERIALS**

Not applicable.

**AUTHOR CONTRIBUTIONS**

FEZ and SR—designed the research study; wrote the manuscript. Both authors read and approved the final manuscript.

**ETHICS APPROVAL AND CONSENT TO PARTICIPATE**

Not applicable.

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**CONFLICT OF INTEREST**

The authors declare no conflict of interest.

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