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Letter to the Editor / Reply

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Reply to: Letter to the Editor on the Paper: "Dental Health Inequalities among Indigenous Populations: A Systematic Review and Meta-Analysis"

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Dear Editor,

We are pleased our article is of interest to readers of *Caries Research* and appreciate the opportunity to respond to the "Letter to Editor" comments by Balachandran et al. [2022] regarding our publication, "Dental Health Inequalities among Indigenous Populations: A Systematic Review and Meta-Analysis"[Nath et al., 2021]. We agree with many of the valid points and discrepancies that were raised. In specific reference to the descriptive error regarding the paper by Kumar et al. [2013], this was merely a typographical oversight that was missed by the authors.

The term "dental" contrary to "oral" is used to describe things that relate to teeth or to the care and treatment of teeth [Collins, 2022]. According to the GBD 2017 Oral Disorders Collaborators et al. [2020], untreated dental caries is the most common dental disease estimated to affect around 3.5 billion people worldwide. Therefore, we decided to use a more generalized proxy terminology for dental caries inequality as "dental health inequalities."

The new PRISMA statement 2020 has updated the flow diagram, allowing reporting of the literature separately according to the source [Page et al., 2021]. The additional report was identified at a later stage from full-text citation searching but was excluded after assessment for eligibility. We agree that this should have been reflected on the flow diagram, but this is one of the major drawbacks of using an older version of the PRISMA statement (2009) where there was no separate way to report the reasons for the exclusion of additional reports [Moher et al., 2009].

In our review, we included studies with comparative data (Indigenous population vs. general population) and standardized mean difference of mean dmft/DMFT score and prevalence scores were used as an effect outcome measure. The funnel plot is a scatter diagram that represents study-specific effect sizes against study precision and means for detecting publication bias and exploring small study effect [Sterne et al., 2011]. The shape of the inverted funnel should be symmetric in the absence of publication bias [Ahmed et al., 2012]. But this asymmetry could be due to other factors as well such as study size or between-study heterogeneity [Sterne et al., 2011]. Large sample size studies would be at the apex of the triangle and smaller studies would be at the base of the triangle. The plots allow visualization of the missing areas, especially in the middle of the triangle indicating that small studies with nonsignificant results might not have been published. From all our plots, the scatter points were distributed symmetrically all around the inverted funnel and

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the effects of publication would not have affected the results, and we believe it is an important aspect of the review. We would again like to thank Balachandran et al. for critically reviewing our paper and discussing some of the important points.

Conflict of Interest Statement

The authors have no conflict of interest to declare.

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Author Contributions

Sonia Nath drafted the responses of the letter to editor, and critically edited and reviewed the paper. Kostas Kapellas and Lisa Jamieson critically reviewed and edited the letter. Final version of the letter was approved by all the authors.

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