

Letter to the Editor:

Inviting translational consideration of the MIH terminology dilemma

Dear Editor

The recent review "*Molar incisor hypomineralisation (MIH) and hypomineralised second primary molars (HSPM): do we need to alter terminology and definition? A scoping review*" (Bandeira Lopes, et al. 2026) was of great interest to us. We write to applaud all concerned in the publication of this breakthrough article, recognising the terminological dilemma surrounding MIH and HSPM impacts numerous publishers and readers around the world. All of us agree with the clinical conclusions reached, and we would respectfully like to flesh them out with our translational science perspective.

The paediatric dentists among us point to additional considerations about meaningful communication across various audiences (e.g. referring dentists, other specialists, industry, young patients and their families). Orthodontists and oral surgeons have particular concerns about other types of hypomineralised molars (12-year molars, third molars). Therapists, hygienists and dental auxiliaries engaged in school-screening programmes prioritise early-erupting teeth (primary canines, 2-year molars) as sentinels for early intervention. Scientists wonder why this dilemma arose in the first place, noting that literature from 1949 onward points to an acquired spectrum disorder affecting both dentitions. Additionally, they cite recent biochemical findings from human and animal studies that reinforce this clinico-scientific understanding and underscore longstanding aetiological concerns about the "I in MIH". Additionally, paediatricians emphasise the value of applying a medical lifecourse approach to terminology, clinical management, and much more. Capping this off, end-translators (industry, public health, government, other implementation stakeholders) and the affected public add other voices relevant to solving this dilemma.

From such holistic considerations – and recognising the global majority don't speak English – it follows that a robust solution to this broader terminological challenge requires our whole field to work towards adopting a cross-sector, translational approach at worldwide level. As many readers are aware, an impressive upswing in clinical and epidemiological reports has exposed several terminological inconsistencies extending beyond MIH and HSPM. A strong start has been made to rectify this concern at the scientific end, in collaboration with terminologists at the US National Library of Medicine and SNOMED CT. Indeed, Bandeira Lopes and colleagues used the upgraded terminology at MEDLINE (new MeSH term and academic definition for "molar hypomineralisation" or "MH") that ensued in 2023. This advance followed a 2021 review of "chalky teeth research" over the preceeding century, and introduced the draft classification of MH as a demarcated opacity disorder. Additional definitions for MH, as suited to translational contexts, were considered using a consensus-seeking Green Paper approach, with public airing at a pioneering series of translational events from 2020-24 (Childers and Hubbard, 2024, The D3 Group 2026). But much remains to be done in regards to scientific harmonisation of today's discrete clinical concepts – particularly enamel hypomineralisation, demarcated opacity disorders (including MIH and HSPM), hereditary enamel defects, other developmental dental defects, and enamel caries – under a socially-impactful, translational umbrella.

We invite everyone interested in this global-health matter – whether they be readers, authors, reviewers, or editors – to collaborate in a translational attack on the broader terminological issues raised by this timely article. Together, we can then seek universal adoption of the socially transformative new paradigm for MH and chalky teeth.

Sincerely,

Vidal Perez, Michael Casas, Kevin Donly, Tim Wright, Noel Childers, Morenike Folayan, Sylvie Babajko, Ben Ganss
On behalf of The D3 Group

References

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TITLE

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DECLARATIONS

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