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TITLE

Letter to the Editor of JDR:
Inviting scientific consideration of the MIH terminology dilemma

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MeSH KEY WORDS

Molar hypomineralization, developmental defects of enamel, medical subject headings, controlled vocabulary, terminology, translational science

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Letter to the Editor at JDR:

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The recent investigation *"Systemic Inflammation and Molar Incisor Hypomineralisation: A Cohort Study"* (Shields et al; [1]) is praiseworthy for questioning the medical origins of this global problem. However, it's unclear why the paper was published under a traditional clinical label, given that "MIH" under-represents the scientific problem and incisors weren't addressed.

Today's scientifically stronger concept – idiopathic molar hypomineralization (MH) – encompasses molars of any type across primary and permanent dentitions while avoiding incisor-related etiological confounding. It developed from a 2010 JDR paper on pathogenesis, was streamlined to MH in 2017, and then classified for the first time as a demarcated opacity disorder in 2021 [2]. In 2022, the US National Library of Medicine formalized MH as the preferred concept through a new MeSH descriptor, definition, and tree hierarchy. MIH and incisor hypomineralization remain as narrower concepts within the MH record [3].

Ongoing conceptual refinement and international consensus-building – including at IADR's 2024 congress – are well documented [3,4]. In a 2024 editorial, *Pediatric Dentistry* adopted the MH paradigm, yet many journals still publish MIH and related clinical labels including HSPM [4]. A recent scoping review recommended evolving beyond MIH but didn't address the current MeSH standard [5, 6].

We think journals, editors, reviewers and authors should share responsibility for following current bibliographic standards. Repositioning today's "MIH terminology dilemma" as a broader need to modernize hypomineralization terminology for social good would offer global benefit [6, 7]. Stakeholders are encouraged to align with the MH MeSH framework and participate in its conceptual and translational development.

Sincerely,

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

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