

Integrating Oral Health into the Core of Public Health

Hadi Ghasemi

Department of Community Oral Health, School of Dentistry, Shahid Beheshti University of Medical Sciences

Daneshjoo Blvd., Evin, Tehran, Iran

***Corresponding Author:** Hadi Ghasemi, Department of Community Oral Health, School of Dentistry, Shahid Beheshti University of Medical Sciences Daneshjoo Blvd., Evin, Tehran, Iran, E-mail: ha.ghasemi@sbmu.ac.ir

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Dear Editor,

Oral diseases affect 3.5 billion people [1]. Approximately 2.5 billion people suffer from untreated dental caries [2]; while severe periodontitis affects another 1 billion [3]. These are not just minor tooth issues that only dentists worry about—they are the most prevalent non-communicable diseases (NCDs) worldwide. We can flip through most national NCD strategies, and will find oral health buried in an annex, if it appears at all. This gap is increasingly difficult to justify in light of current epidemiological evidence.

The economic burden further strengthens this argument. The treatment of dental caries imposes substantial economic costs. From over \$10 billion annually in Italy to \$36.2 billion in Brazil—and those figures skew heavily toward the poorest populations [4]. Globally, the direct treatment bill for caries, periodontitis, and major tooth loss sits at roughly \$357 billion [5]. That is not a side issue; that is an outflow of health-system resources. These expenditures are largely attributable to diseases that are substantially preventable. Diseases that are overwhelmingly avoidable [6].

The traditional infectious-disease model of dental caries is increasingly considered insufficient. Giacaman et al. [7] have shown convincingly that we must treat caries as a behavioral NCD that is driven by sugar, tobacco, and lifestyle, not just bacteria. But here is the rub: if we accept that framing, we have to accept the policy implications. That means sugar taxes, advertising restrictions, and fluoridation must sit alongside tobacco and alcohol control in every national NCD action plan. The WHO's Global Oral Health Action Plan (2023–2030) [8] emphasizes this explicitly. The FDI now backs it [9,10]. The evidence is robust.

Despite this evidence, implementation remains limited?

The WHO Bangkok meeting report [11] calls for integration, but "calls" are not enough. What we actually see is a persistent institutional silo—dentistry is still treated as a clinical specialty rather than a core public health lever. Benzian et al. [12] proposed expanding the NCD framework to a 6x6 model explicitly including oral diseases and sugar. I agree with them entirely, but I would go further: unless oral health metrics are embedded in routine NCD surveillance—right next to hypertension and diabetes—this integration will remain just verbal.

Prevention produces better economic returns than late-stage treatment. Nguyen et al. [13] systematic review confirms this. Despite this evidence most national budgets still pour money into fillings and extractions rather than upstream measures. This pattern suggests that policy priorities remain weighted toward treatment rather than prevention.

I would strongly encourage the journal to use this upcoming thematic issue as an opportunity to formally integrate oral diseases into the NCD prevention framework. Without this inclusion, the issue risks overlooking the most prevalent NCDs globally—and that would be a missed opportunity for the field. The epidemiological evidence—affecting 3.5 billion people—makes a strong case for treating oral health as a standard NCD indicator. This issue could advance the field considerably by taking that step. The WHO frameworks already support it, and the data are robust enough to act upon.

References

1. Zhu M, Xu S, Li Y, Wang W, Liu L, et al. (2025) Global burden of non-communicable diseases attributable to behavioral factors. *Science Bulletin*.
2. Li X, Li R, Wang H, Yang Z, Liu Y, et al. (2025) Global burden of dental caries from 1990 to 2021 and future projections. *Intel Dent J* 75: 100904.
3. Hu M, Zhang R, Wang R, Wang Y, Guo J (2025) Global, regional, and national burden of periodontal diseases from 1990 to 2021 and predictions to 2040: An analysis of the global burden of disease study 2021. *Frontiers Oral Health* 6: 1627746.
4. West NX, Verma N, Dunleavy G, Jain S, de Rodrigues JM, et al. (2025) Socioeconomic inequalities and the economic burden of dental caries: A longitudinal simulation analysis across forty countries. *BMC Public Health*.
5. Chapple IL (2025) The global burden of oral disease – what is the fuss? *BDJ Team* 12: 364-7.
6. Peres MA, Macpherson LM, Weyant RJ, Daly B, Venturelli R, et al. (2019) Oral diseases: A global public health challenge. *The lancet* 394: 249-60.
7. Giacaman RA, Fernández CE, Muñoz-Sandoval C, León S, García-Manríquez N, et al. (2022) Understanding dental caries as a non-communicable and behavioral disease: Management implications. *Front Oral Health* 3: 764479.
8. World Health Organization. Global strategy and action plan on oral health 2023–2030. Geneva: World Health Organization; 2024.
9. Glick M, Williams DM (2021) FDI Vision 2030: delivering optimal oral health for all. *International Dent J* 71: 3.
10. Skrypnik IL, Mazur IP (2025) Policy statements of the FDI World Dental Congress in Shanghai 2025. *Oral and General Health* 6: 167-77.
11. World Health Organization. Report of the WHO global oral health meeting, Bangkok, Thailand, 26–29 November 2024. Geneva: World Health Organization; 2025.
12. Benzian H, Daar A, Naidoo S (2023) Redefining the non-communicable disease framework to a 6×6 approach: Incorporating oral diseases and sugars. *Lancet Public Health* 8: e899-e904.
13. Nguyen TM, Tonmukayakul U, Le LK, Calache H, Mihalopoulos C (2023) Economic evaluations of preventive interventions for dental caries and periodontitis: A systematic review. *Appl Health Economics Health Policy* 21: 53-70.