

## Orthodontics

### NAM in cleft care – boon or bane

Sir, the paper on orthodontic management of patients with cleft lip and palate from birth to late mixed dentition was succinct and informative.<sup>1</sup> The authors state, however, that NAM procedures require higher amounts of care and results show limited or unclear findings regarding effectiveness. While fully agreeing with the authors' statements on the efficacy of NAM procedures on the basis of current evidence gleaned from papers comparing outcomes, a thought could also be given to potential benefits of NAM in terms of coping responses of caregivers to children with clefts. It is known that parents of children born with clefts experience five stages of reactions including shock, denial, sadness and anger, adaptation and reorganisation.<sup>2</sup> Caregivers experiencing a gamut of emotions at the initial period have more opportunities for bonding with the child during the period of NAM. Initial apprehension and anxiety in caregivers about their ability to satisfactorily carry out NAM-related procedures slowly gives way to a feeling of optimism and improved self-esteem and empowerment on observing facial improvements in the child.<sup>3</sup> A recent paper evaluating parental stress of 117 children born with clefts in two culturally different countries (Taiwan and Germany) demonstrated NAM to facilitate easier surgical treatment and provide positive coping strategies for parents of children born with such defects.<sup>4</sup> Lastly, a paper dealing with stress and quality of life in caregivers of children with clefts showed caregivers having increased levels of stress and reduced quality of life.<sup>5</sup> Managing such a child with NAM during this trying period could help alleviate stress for caregivers and act as a positive reinforcement mechanism.

*P. Chitra, Telangana, India*

#### References

- Gillgrass T. The orthodontic management of patients with cleft lip and palate: from birth to the late mixed dentition. *Br Dent J* 2023; **234**: 873–880.
- Drotar D, Baskiewicz A, Irvin N, Kennell J, Klaus M. The adaptation of parents to the birth of an infant with a congenital malformation: a hypothetical model. *Pediatrics* 1975; **56**: 710–717.
- Sischo L, Broder H L, Phillips C. Coping with cleft: a conceptual framework of caregiver responses to nasolabial molding. *Cleft Palate Craniofac J* 2015; **52**: 640–650.
- Roth M, Lonic D, Grill F D *et al.* NAM – help or burden? Intercultural evaluation of parental stress caused by nasolabial molding: a retrospective multi-center study. *Clin Oral Investig* 2021; **25**: 5421–5430.
- Bom G C, Prado P C, Farinha F T, Manso M M, Dutka J D, Trettene A D. Stress, overload and quality of life in caregivers of children with/without orofacial cleft and dysphagia. *Texto Contexto-Enferm* 2021; doi: 10.1590/1980-265X-TCE-2020-0165.

*Toby Gillgrass, Glasgow, UK responds:*  
 Thank you for your interest in the paper and your comments regarding parent anxiety. My only comment would be that I would hope that parent anxiety could be addressed in a more appropriate manner/method than prescribing a child an appliance that increases the patient and family burden of care with limited evidence to its long-term clinical benefit.

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## Oral diseases

### Oral frailty and associated diseases

Sir, oral frailty can lead to a variety of associated diseases and increase the risk of physical frailty, sarcopenia, disability, mild cognitive impairment, lowering renal function, late-life depression and mortality.

In 2018, Tanaka *et al.* reported that 16% of 2,011 elderly individuals over 65 years had oral frailty at baseline, which was significantly associated with 2.4-, 2.2-, 2.3-, and 2.2-fold increased risk of physical frailty, sarcopenia, disability, and mortality, respectively.<sup>1</sup>

Oral frailty for mild cognitive impairment in community-dwelling older adults of 1,410 participants with average age 72.4 was investigated.<sup>2</sup> The group with oral frailty had a significantly higher hazard ratio for new-onset mild cognitive impairment than the other groups without oral frailty.

Nakai *et al.* studied the association between bone mineral density and oral frailty.<sup>3</sup> Their study included 444 residents aged 40 years and older. They found that lower bone mineral density seems to be associated with lower renal function only when accompanied by oral frailty.

In 1,100 community-dwelling older adults in Taiwan, physical frailty and oral frailty were significantly associated with a major mental health problem such as late-life depression.<sup>4</sup>

The latest research results suggest that regular oral care can help to reduce the risk of developing diseases of older adults associated with oral frailty.

*Y. Takefuji, Tokyo, Japan*

#### References

- Tanaka T, Takahashi K, Hirano H *et al.* Oral frailty as a risk factor for physical frailty and mortality in community-dwelling elderly. *J Gerontol A Biol Sci Med Sci* 2018; **73**: 1661–1667.

- Nagatani M, Tanaka T, Son B-K *et al.* Oral frailty as a risk factor for mild cognitive impairment in community-dwelling older adults: Kashiwa study. *Exp Gerontol* 2023; doi: 10.1016/j.exger.2022.112075.
- Nakai S, Suzuki F, Okamoto S *et al.* Association between bone mineral density and oral frailty on renal function: Findings from the Shika Study. *Healthcare (Basel)* 2023; doi: 10.3390/healthcare11030314.
- Lin Y-C, Huang S-S, Yen C-Wei, Kabasawa Y, Lee C-H, Huang H-L. Physical frailty and oral frailty associated with late-life depression in community-dwelling older adults. *J Pers Med* 2022; doi: 10.3390/jpm12030459.

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## Sustainable Development Goals STRINGS

Sir, the recent *BDJ* initiative to focus on the Sustainable Development Goals (SDGs) is commendable. Practising in our specialised fields as well as understanding the broader global challenges is crucial indeed.<sup>1</sup> The UN SDGs acknowledge the interdependence of eradicating poverty, and improving health, education and economic growth while addressing climate change and preserving our environment.

Efforts have been made to link academic publications to specific SDGs. According to a 2022 report<sup>2</sup> by Steering Research and Innovation for Global Goals (STRINGS), a consortium of researchers at the University of Sussex, University College London and the United Nations Development Programme, high-income countries and upper-middle-income countries dominate the global research agenda but only 20–40% of their research is focused on the SDGs. Low-income countries demonstrate a higher alignment with the goals; 60–80% of their research is related to the SDGs but they contribute 0.2% to the global research output.

The STRINGS project has compiled extensive datasets and detailed case studies to guide researchers, funders, and policymakers in directing efforts and resources towards SDG-related issues. By fostering appropriate prioritisation and empowering marginalised groups in global research and innovation, we can work towards solving, rather than exacerbating, the challenges of today.<sup>2</sup>

*A. Kaushik, Chandigarh, India*

#### References

- Hancocks S. The bigger picture. *Br Dent J* 2023; **235**: 9.
- Ciarli T (ed). *Changing Directions: Steering Science, Technology and Innovation Towards the Sustainable Development Goals*. 2022. Available at: [https://strings.org.uk/wp-content/uploads/2022/10/STRINGS\\_Changing\\_Directions.pdf](https://strings.org.uk/wp-content/uploads/2022/10/STRINGS_Changing_Directions.pdf) (accessed July 2023).

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