



They're not 'just baby teeth'

Author information

¹Royal London Dental Hospital, Barts Health NHS Trust, London, UK

Richa Rughani¹ and **Amrisha Ondhia¹** look at the critical need to change society's views on primary teeth.

In brief

- Emphasises the importance of healthy primary teeth, and the link between poor oral health in children and their quality of life.
- Describes common misconceptions parents present to the paediatric dental team regarding primary teeth.
- Provides advice for primary care to help optimise care for paediatric dental patients.

Abstract

Healthy teeth are essential for health, function, and the appearance of children. The importance of primary teeth is frequently underestimated by parents and carers as these teeth will be 'replaced'. However, with waiting lists for paediatric patient care increasing and clinicians in hospital teams battling with the backlog from the COVID-19 pandemic, the need for appropriate management in primary care is greater than ever and parents may be more motivated to focus on prevention and oral care if aware of this. There needs to be a change in the perception of the importance of the primary dentition, including parental education and dental treatment, where possible, in primary care prior to referral. Unfortunately, many parents are unaware of the impact of poor oral health until it is too late. Pain, difficulty eating and drinking, sleepless nights, missed school, loss of confidence, and abnormalities in the development and eruption of the permanent dentition are just a few of the possible consequences of a neglected primary dentition. This article explores the importance of the primary dentition, the critical need to change society's views on primary teeth, and the role of the wider team in helping to achieve this.

Introduction

'They're just baby teeth' is a sentence that is very familiar to members of the paediatric dental team. The importance of primary teeth is often underappreciated and is cause for concern due to the subsequent lack of priority given to maintaining oral health in children. This can result in dental caries and

poor oral health which left untreated can result in pain and swelling. Unfortunately, it is not uncommon that attention is given to oral health only after children are unable to eat, missing school, and keeping the family up at night.¹ It is at this point that families desperately seek, and often cannot access appropriate dental care. After obtaining an appointment, limited cooperation can present as an obstacle to the clinician being able to provide chairside treatment successfully. This starts a vicious cycle of poor quality of life if oral health is not prioritised (Fig. 1). Thus, the child is referred to paediatric dental services and joins a long waiting list alongside many other children in pain.

Areas of concern

'Can't you just put them to sleep?'

Unfortunately, this is another common question that is asked of the paediatric dental team. Time must be taken to explain to carers that management of patients under general anaesthesia is not as simple as 'putting them to sleep'. Waiting times for general anaesthesia are often lengthy. During this wait, children continue to suffer from pain and recurrent abscesses.² Difficulty eating and drinking can result in malnutrition; this is often accompanied by sleepless nights for the child and families alike.³ In addition, missed school due to dental pain can impact on a child's education and social development.¹ Furthermore, a general anaesthesia procedure puts the child at a serious, though very small, risk of death (one in 100,000 to one in a million)⁴ from a general anaesthetic required for a condition that is largely preventable. The serious risks associated with general anaesthesia must be carefully communicated so that an appreciation of the gravity of the situation may be understood. Table 1 lists several of the many negative sequelae of poor oral health for children and their families.

Financial burden

There are both direct and indirect financial costs of treating dental caries for children. Directly, poor child oral health costs the NHS millions. Tooth extraction in patients aged 0–19 years cost the NHS £50.5 million in the financial year of 2015 to 2016, with £7.8 million being spent on tooth extractions in children under the age of five. In addition, parents require time off work to attend emergency care, to pick up children up from school when they're in pain, and to take children to multiple appointments, as supported by research showing that 41% of parents and carers of these children were employed.

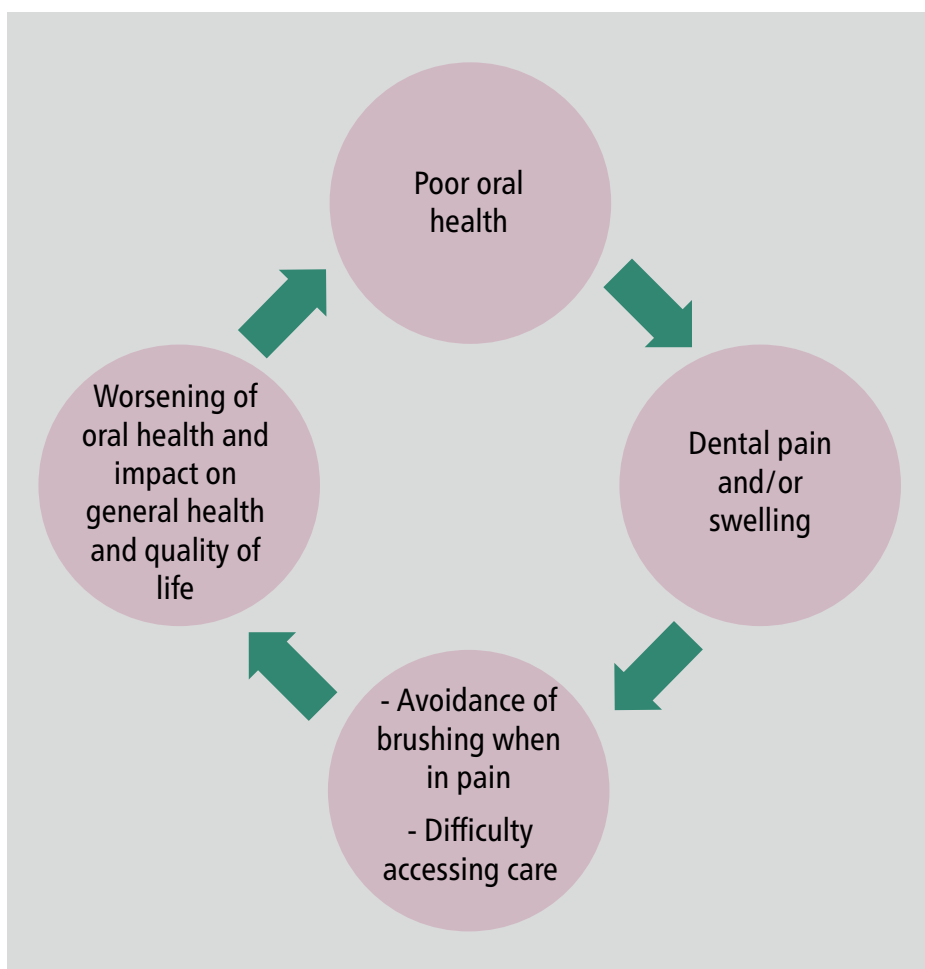


Fig. 1 The vicious cycle commenced when oral health is not prioritised

Table 1 Summary of negative sequelae of poor oral health in children

Summary of negative sequelae of poor oral health in children^{2,3,4}

Future oral health	Damage to the development and eruption of permanent successors Poor relationship with dentists Poor attitude towards oral health in adult dentition
General health	Difficulty eating and drinking and a resulting failure to thrive Nutritional deficiencies Chronic infection and pain
Quality of life	Missed school Reduced social interactions Loss of confidence
Wider impact on family	Sleepless nights Time off school/work to attend appointments

In comparison, the cost of prevention is far less. For example, Public Health England (PHE) estimates that targeted community fluoride varnish programmes bring a return of investment of £2.29 for every £1 spent after five years. This further increases to £2.74 after ten years.⁵

We must remember though, that the greatest expense is that of the cost of chronic, and largely preventable, pain and infection to a child's quality of life.

Addressing the problem

So how do we change the view of 'they're just baby teeth'?

There are many individuals involved in and responsible for the care of a child. Our healthcare colleagues, ranging from medical practitioners to midwives, can help us tackle this issue. There needs to be a greater understanding and deeper appreciation for the importance of child oral health. Our colleagues that are not dentally trained need to understand their role in child oral health and not see it as separate from a child's general health. Education is an indispensable tool in improving appreciation of primary teeth and child oral health.

The role of non-dental healthcare professionals

Every healthcare professional involved in a child's care can play a role in improving child oral health. Midwives, health visitors, school nurses, general medical practitioners and pharmacists are just a few examples of those who may be able to help in the following ways:

- Encourage attendance within the first 12 months as per the Dental Check by One campaign that was launched in 2017 to increase opportunities for delivery of preventative advice and early acclimatisation⁶
- Provide diet advice to help improve general and oral health through awareness of hidden sugars and support the reduction of sugar in the diet
- Identifying and supporting families where children are at an increased risk of poor oral health, for example those where older children have required dental extractions or treatment under general anaesthesia⁷
- Signposting to local dental services⁵
- Offering oral health advice based on the *Delivering better oral health – quick guide to a healthy mouth in children* factsheet.⁵

Many parents have a very limited understanding about oral health and dental development thus importance may not be

Table 2 Utilisation of the dental team to improve child oral health	
Role	Paediatric dentistry treatment in scope of practice ¹⁷
Dental nurse	Provision of oral health education and diet advice Application of fluoride varnish (on prescription from a dentist or direct as part of a structured dental health programme)
Dental hygienist	As above Application of fissure sealants
Dental therapist	As above Carry out direct restorations of primary and permanent teeth Extract primary teeth Place pre-formed crowns on primary teeth
Dentist	As above Prescribe and provide endodontic treatment on adult teeth Prescribe and provide fixed and removable prostheses Extract permanent teeth

‘As dentistry slowly recovers from the pandemic, the role of the GDP in improving and maintaining child oral health is more important than ever before. Improved management of paediatric patients within primary care will improve patient outcome’

given to it. Studies show that 54% of parents thought that the first permanent molar erupted between ten and 12 years of age.⁸ Many are unaware of the eruption of first permanent molars, as there is no exfoliation of a primary tooth. This can lead to parents being shocked to hear that at ages as young as seven-years-old a child may have an unrestorable adult tooth due to extensive dental caries.

More than one third (35%) of expectant mothers had not received oral health advice during their pregnancy and 15% reported using magazines and the internet for advice.⁹ This is a great cause for concern due to the potential for unregulated, incorrect health

advice being referenced.

The NHS recommends breastfeeding for the first six months of life and that children should be given milk until they are two years of age. Similarly, the World Health Organisation recommends that all babies are breastfed for up to two years or longer.¹⁰ Research shows that breastfeeding until the age of 12 months is not associated with an increased risk of dental caries and may even provide protection compared with formula milk.¹¹ However, breastfeeding beyond this age has been found to increase the risk of caries.¹¹ The British Society of Paediatric Dentistry (BSPD) has published this in a position statement to address the link

between prolonged breast feeding and dental caries.¹² Of concern, only 19% of expectant mothers were aware that breast milk can cause dental caries and only 26% linked dairy milk to caries.⁹ Since differing advice may confuse parents, visiting the dentist allows accurate and tailored dental education to be delivered. Parents should be advised on the impact of prolonged breast feeding on child oral health and its association with dental caries.

What can general dental practitioners (GDPs) do to help?

As dentistry slowly recovers from the pandemic, the role of the GDP in improving and maintaining child oral health is more important than ever before. Improved management of paediatric patients within primary care will improve patient outcome and assist in preventing further increase in referrals to secondary and tertiary care.

Provide realistic advice regarding hospital waiting times

Many parents are unaware of the long waiting times for paediatric dental care within hospitals. An increased awareness of this may motivate parental focus on prevention and encourage preparedness for local treatment.

Stay up to date with guidelines

Guidelines are essential for helping clinicians navigate treatment planning for patients. They assist delivery of appropriate care and therefore improve patient outcome. The British Society of Paediatric Dentistry,¹³ Scottish Dental Clinical Effectiveness Programme,¹⁴ and Royal College of Surgeons of England Faculty of Dental Surgery,¹⁵ to name a few, provide excellent guidelines for the provision of paediatric dentistry. Of note, the commonly used *Delivering better oral health: an evidence-based toolkit for prevention*¹⁶ was most recently updated in November 2021 and practitioners are advised to familiarise themselves with recommendations.

Utilise the entire team to improve delivery of care

Maximising use of the diverse skill set found within the dental team can optimise opportunities for delivery of prevention and treatment for paediatric patients. Examples are listed in Table 2.

Encourage visits from a young age

As per the British Society of Paediatric Dentistry's initiative,⁶ advise families expecting children of the importance of children having their first dental check by

age one and ensure that they are aware of free NHS dental care for children. It is also essential to ask about siblings and other children in the family to encourage their attendance.

Conclusion

Unlike other areas of general health, we have a greater influence over many factors that contribute to good oral health. As such, dental professionals and health care professionals should work together to encourage the understanding of the importance of oral health amongst parents, carers and members of the public.

So why are they not just baby teeth? It is not just about teeth, it's about the child and ensuring that every child is as healthy and happy as possible to reach their full potential.

Declarations of interest

The authors declare that there are no conflicts of interest.

References

1. Low W, Tan S, Schwartz S. The effect of severe caries on quality of life in young children. *Pediatr Dent* 1999; **21**: 325–326.
2. North S, Davidson L E, Blinkhorn A S, Mackie I C. The effects of a long wait for children's dental general anaesthesia. *Int J Paediatr Dent* 2007; **17**: 105–109.
3. Sheiham A. Dental caries affects body weight, growth and quality of life in pre-school children. *Br Dent J* 2006; **201**: 625–626.
4. Royal College of Anaesthetic. Common events and risks for children and young people having a general anaesthetic. 25 April 2022. Available at: <https://www.pslhub.org/learn/patient-safety-in-health-and-care/high-risk-areas/paediatrics/rcoa-infographic-common-events-and-risks-for-children-and-young-people-having-a-general-anaesthetic-25-april-2022-r6788/> (accessed December 2022).
5. Public Health England. Health matters: child dental health. 14 June 2017. Available at: <https://www.gov.uk/government/publications/health-matters-child-dental-health/health-matters-child-dental-health> (accessed March 2022).
6. British Society of Paediatric Dentistry. Dental Check by One to improve oral health in UK children. 2018. Available at: <https://www.bspd.co.uk/Portals/0/National%20launch%20for%20Dental%20Check%20by%20One%20campaign%20final%202022-09.pdf> (accessed March 2022).
7. Rajavaara P, Laitala M-L, Vähänikkilä H, Anttonen V. Survey of family-related factors

of children treated under dental general anaesthesia. *Eur J Paediatr Dent* 2018; **19**: 139–144.

8. Jetpurwala M, Sawant K R, Jain P S, Dedhia S P. Parental perception of the importance of the permanent first molar in their children. *J Dent Child (Chic)* 2020; **87**: 26–30.
9. Correia P, Alkhatrash A, Williams C *et al*. What do expectant mothers need to know about oral health? A cohort study from a London maternity unit. *BDJ Open* 2017; doi: 10.1038/bdjopen.2017.4.
10. NHS. Drinks and cups for babies and young children. 2022. Available at: <https://www.nhs.uk/conditions/baby/weaning-and-feeding/drinks-and-cups-for-babies-and-young-children/> (accessed January 2023).
11. Branger B, Camelot F, Droz D *et al*. Breastfeeding and early childhood caries. Review of the literature, recommendations, and prevention. *Arch Pediatr* 2019; **26**: 497–503.
12. British Society of Paediatric Dentistry. Position Statement on Infant Feeding. January 2018. Available at: <https://www.bspd.co.uk/Portals/0/BSPD%20statement%20on%20Infant%20feeding%20Jan%202018i.pdf> (accessed March 2022).
13. British Society of Paediatric Dentistry. BSPD Guidelines. Available at: <https://www.bspd.co.uk/Professionals/Resources/Clinical-Guidelines-and-Evidence-Reviews/BSPD-Guidelines> (accessed November 2022).
14. Scottish Dental Clinical Effectiveness Programme. Published guidance. Available at: <https://www.sdcep.org.uk/published-guidance/> (accessed November 2022).
15. Royal College of Surgeons of England. Faculty of Dental Surgery (FDS). Clinical Guidelines. Available at: <https://www.rcseng.ac.uk/dental-faculties/fds/publications-guidelines/clinical-guidelines/> (accessed November 2022).
16. Public Health England. *Delivering better oral health: an evidence-based toolkit for prevention*. 9 November 2021. Available at: <https://www.gov.uk/government/publications/delivering-better-oral-health-an-evidence-based-toolkit-for-prevention> (accessed March 2022).
17. General Dental Council. The scope of your practice. Available at: <https://www.gdc-uk.org/information-standards-guidance/standards-and-guidance/scope-of-practice> (accessed January 2023).

<https://doi.org/10.1038/s41407-023-1709-5>