



Editorial

How soon is soon enough? The challenge of implementing behaviours conducive to good oral health in at-risk infants and toddlers

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This commentary is about one of the last great challenges facing dental public health. It is a problem I will discuss in a United Kingdom context, but the issues will, I am sure, be of relevance to all readers of this Journal wherever they practice. It is a problem that I spent many hours trying to address when I was in the early stages of my career. Now, when I am nearer the end than the beginning, it is still a problem. The issue? Preventing dental decay in those aged under 3 years old, who in the main, reside in areas of social and economic disadvantage.

Traditionally, the first epidemiological assessment of oral health in UK children was undertaken at age 5 years. Starting school provided an easy first opportunity to conduct representative, epidemiological surveys. Oral health strategies produced in the 1990s (Department of Health, 1994; The Scottish Office, 1995) all had targets for improved oral health in 5-year-olds and we have been quite successful in achieving these (Jones *et al.*, 2017). After at least two decades of stagnation as far as improvements in decay prevalence in primary teeth was concerned, the overall experience of dental caries in 5-year-olds has fallen in England, Scotland and Wales since 2008, although social gradients persist, as do differences in the overall prevalence rates between these countries.

However, surveys of 5-year-olds failed to quantify an important issue, how soon does decay in young children become a problem? After thirty years of surveying 5-year-olds, the leaders of the British Association for the Study of Community Dentistry (BASCD) epidemiological programme had an inspired idea, to survey the oral health of 3-year-olds. The key finding of these surveys was that by age 3, 1 in 10 children had dental caries that had progressed into dentine. In the most disadvantaged areas, it was 1 in 5. Those with decay had on average 3 affected teeth. Much of the recent improvement in 5-year-olds has been attributed to supervised school-based toothbrushing schemes. Important as they are, school-based schemes have a vulnerability. They may be too late to maximally benefit the most susceptible and the most vulnerable, who, by the time they reach school starting age have already embarked on the well-trodden path to general anaesthesia for tooth extraction. It is therefore imperative that oral health improvement programmes tackle prevention in infants and pre-school children.

What needs to be done is agreed. The actions required have been very clearly set out in guidance produced by Public Health England (PHE, 2017). If you haven't looked at this resource, I urge you to do so. The guidance recognises that access to at-risk infants and their parents requires action way beyond the traditional dental team. Midwives, health visitors, paediatricians, general medical practitioners, children's nurses, general practice nurses, local authority commissioners and voluntary organisations are just some of those listed as necessary players in the game. Our challenge is how to convince these groups that they are indeed stakeholders. Oral health is, for many of these groups, way down on their list of personal and professional interests or perceived responsibilities.

A quarter of a century ago, as an enthusiastic and fresh-faced public health trainee, I gave a lecture to a group of midwives in a hospital servicing a very deprived area in the west of Scotland. They listened to me appreciatively, but at the end, the friendly, long-serving matron took me aside and said with the intention of helping me: "That is very good son, but when the women are with us, they are more worried about their stiches [at childbirth], than their bairn's¹ teeth". I didn't have an answer then, but this anecdote still reminds me of the challenges to be faced and overcome.

A more experienced me, now recognises the need to involve those from outside the dental profession in the development of oral health improvement programmes from their inception. Programmes like "Lift-the-lip", which trains health visitors to recognise caries in early childhood, are an example of how we might extend our reach to parents of at-risk under-3s (Queensland Government, 2016; Wilson, 2017). The Childsmile programme in Scotland has the luxury of dental health support workers embedded within the community, linked with health visitors via a universal child health support system, and is able to provide peer assistance to parents and carers identified as in need of additional help. In a form of social prescribing, they can direct such individuals to receive support with parenting skills, including adoption of healthy feeding practices, and direction into dental services (Macpherson *et al.*, 2019).

1 Bairn – Scottish word for child.

And therein lies the next issue I want to raise: access to dental care for under-3s. It is generally accepted by the dental public health community that it is never too early to socialise an infant to the surrounds of a dental surgery. But how many of you have had the experience of enthusing health visitors to encourage mothers to take their toddler to a dentist, only for the dentist to turn them away, suggesting they bring them back when they are older, perhaps hoping that they don't come back at all? Last year, in England, nearly 7 in 10 children aged 0 to 3 years failed to see an NHS dentist (NHS Digital, 2019). This in spite of a strategy to encourage all children to have a "dental check by one" (British Society of Paediatric Dentistry, 2019). The English Department of Health has issued helpful guidance to dentists, recognising the limitations of examining pre-school children, but indicating what advice should be given and what reimbursement may be claimed (Chief Dental Officer for England, 2017). As NHS dental services are reformed in England and Wales, with an emphasis on prevention rather than cure, the mind-set needs to be: it is never too early to take your child to a dentist (or other member of the dental team).

And so, to perhaps the most important players of all: parents and carers. Pre-school children are totally reliant on others. What they are given to eat, whether they have their teeth brushed, when they are taken to the dentist – this is all down to their responsible adult. However, for those children at greatest risk, oral health often comes low down on the list of the many competing priorities, in what can be chaotic and disadvantaged lives. Households where the parent themselves only attends the dentist when in pain. Households where there might not be any toothpaste, or where siblings may be sharing a toothbrush – a scenario that, when recounted to our middle-class dental students, is frequently disbelieved.

With the Editor's indulgence, a final anecdote. When we were establishing Designed to Smile (2019), of which school-based toothbrushing forms a major component, a 4-year-old boy was being met at the school gates by his mother. He was very excited and explained how he had been given a toothbrush and had had his mouth filled with "foamy stuff". Our oral health educators got the impression that this child had never had his teeth brushed before. Hard to believe in twenty-first century Britain.

So, to conclude, in the main I have discussed "downstream actions". These are of course just one part of the equation. "Upstream" policies and strategies are also

crucial to improving oral health in pre-school children. As an example, the introduction of a tax on sugared drinks in the UK will in time, have an impact. However, more than forty years on from the Ottawa charter, it is clear there are as many hurdles to be overcome in upstream approaches, as there are in the traditional health education approach, but having used up my word count, my thoughts on those will have to wait for another occasion.

I guess nothing I have written here is news to anyone. What I do hope is that these thoughts will act as a reminder of the battle in which we are engaged, to let you know you are not alone and encourage you to keep up the good fight and to spread the notion that "baby teeth do matter".

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