Invest in prevention to improve child oral health in the long-term

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In this issue of the New Zealand Medical Journal, Schluter, Kokaua and Lee characterise the prevalence of severe early childhood caries (S-ECC) among five-year-olds seen in Canterbury District Health Board's Community Oral Health Service as an epidemic. Certainly the prevalence is of epidemic proportions, with nearly one in every five affected by S-ECC, rising to one in four among Māori and two in five among Pasifika. Schluter et al describe dentistry as a neglected area of health policy and so has every dental public health specialist in New Zealand. ‘Wicked problems’ are those which have deep social roots that can’t be solved from inside the healthcare system—oral health inequalities have been described as such. Here we have a wicked problem that is a neglected one too.

In the early 20th century, at a time when oral health in New Zealand was far worse than today, the first letter ever published in the New Zealand Dental Journal optimistically described a pathway to a tooth decay-free New Zealand. That hasn’t been achieved, but improvements have occurred following radical moves such as fluoridation of water supplies in the 1960s (in around half the country), widespread introduction of fluoride toothpaste in the 1970s, and introduction of preventive care visits in the School Dental Service in the 1980s, while oral health took a backwards step with changes to the welfare state in the 1990s. In the 2000s, the Strategic Vision for Oral Health (2006) laid out seven action areas to change New Zealand’s dental care system moving into the 21st century. Most action has focused on the first item, involving the winding-up of the School Dental Service and introduction of a ‘Hub & Spoke’ Community Oral Health Service model. Is the vision of that conversion complete? It has been interpreted differently throughout the country, with many mobile ‘spoke’ clinics being limited to providing checkups or (reportedly) having few miles on the odometer. There have been some advantages, but the hub and spoke model has not brought about a clear improvement in the average number of decayed, missing and filled teeth (dmft) among New Zealand five-year-old children. This statistic has changed little in the past 20 years—it was 1.8 in 1998 and 1.8 in 2018.

Schluter et al state “The likelihood of children’s annual visits to dental clinics ameliorating this crisis is remote”, and they are right. Canterbury District Health Board (and others) have hard-working oral health teams who attempt to enrol and serve as many children as possible. Visiting the dentist does have benefits for oral health-related quality of life, but the incidence of dental caries and overall ‘dmft’ scores (count of decayed, missing and filled teeth) won’t improve by getting children into the dental chair for checkups and treatment. It does not matter whether the clinic is a traditional school clinic or a ‘reoriented’ hub/spoke clinic—most dental treatment still just converts the ‘d’ component of dmft to ‘m’ or ‘f’. If our only approach is to treat dental caries, oral health services will perpetually “chase the tail” of early childhood caries. That is why we need to start with a preventive approach, and the best prevention takes place outside the dental clinic.

Some children have difficulty in accessing health services. Perhaps their parents/guardians can not get away from work or have other children to care for. Nationally, oral health educators or ‘health navigators’ could help to facilitate access to care and serve in a role that is integrated with other
New Zealand health service priorities. It is not just dental professionals who need to keep track of high-risk children. Community-based educators could help facilitate vaccinations, deliver essential medications and oral care products, or help arrange transport of children to healthcare facilities. They might even help in the advent of a future pandemic wave—a flexible workforce of people who know communities well could contribute to contact tracing. Dental caries can often be prevented or ‘arrested’ by applying a fluoride varnish to the teeth, but it needs to get on the teeth in order to be effective (preferably early). Other countries have had successful fluoride varnish application in preschool settings and oral health educators or Kaiāwhina have already been used to ‘lift the lip’ and apply fluoride varnish in Hawke’s Bay preschools.

In terms of wider oral health promotion efforts in New Zealand, the 2014 budget set aside $10,000,000 for a planned social marketing campaign and a very exciting nationwide toothbrush distribution programme for children. However, it seems there has been difficulty in getting that programme off the ground, because so far the output has been limited to a tooth fairy advertisement, recommending the brushing of teeth. The tooth fairy campaign seems to have been successful but very disappointing if it remains a one-off effort. Social marketing should be ongoing, and there are many other oral health messages that need to be heard, not just toothbrushing. Besides, toothpaste companies already promote their products but the challenge is getting them into the hands of every child (supervised, of course). The second side to the oral health promotion plan was indeed a nationwide preschool/school toothbrushing intervention, but that hasn’t been seen. Toothbrush programmes can save a lot of money and can be really acceptable and effective among tamariki.

Some have called for a new strategic vision for oral health or a new national oral health survey, but there is so much unfinished business. The Strategic Vision for Oral Health calls better oral health promotion, but not every DHB has a properly funded oral health promotion team. It also calls for expansion of community water fluoridation, but the fluoridation bill languishes, despite the fact that it would make a difference for oral health and even save the country money. Warning labels, advertising regulations and health taxes could be applied to sugary drinks and confectionery, and this is another area of inaction. It is disappointing that New Zealand is not leading the way in efforts to improve the food environment in which children are raised. Improved access to dental care for young adults could also make a difference to child oral health, because young adults are frequently parents of young children. Low-income young adults need to be able to access preventive and emergency dental care, at a minimum, in order to help improve things for the next generation. Preventive dental care is most effectively delivered by parents at home, and they need to know how.

Dental clinicians are busy at the coalface working within the existing system to care for their patients—they get results, but only for the patient in the dental chair. The wider health professions might help us manage our S-ECC epidemic—it is such a highly prevalent and visible disease that it can frequently be spotted by non-dental health professionals with nothing more than a torch and a few moments to take a look at the teeth. ‘Lifting the lip’ might nudge some towards adopting appropriate dental self-care practices and making an early dental appointment.

The Schluter et al paper provides an epidemiological vantage point, suggesting that the status quo dental care system is not resulting in change. Not surprising, since change is needed in order to effect change. Only politicians can practice dentistry on the grand scale and effect radical change in order to get different results. What will be the next big thing in prevention to improve oral health of New Zealand children?
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Nil.

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