

Oral health: prevention is key

Oral health is a neglected area of global health and has traditionally registered low on the radar of national policy makers. The reasons for this situation are complex and varied. In many countries oral health is not included in national health surveys. And, if data are collected, it is usually in isolation from the context of general health. Moreover, in some cultures, oral health is neglected because teeth are seen as expendable. Dentists have also taken little interest in advocacy to promote good oral health, preferring to treat rather than prevent oral diseases. And, because poor oral health affects morbidity more than mortality, governments have viewed oral conditions as less important than other, more life-threatening diseases.

Yet, globally, the burden of major oral diseases and conditions is high. Dental caries are one of the most common chronic diseases worldwide. 90% of people have had dental problems or toothache caused by caries, and in low-to-middle income countries most caries remains untreated. Severe periodontitis affects 5–15% of most populations. Oral cancer is the eighth most common cancer worldwide and the most common in men in southeast Asia. And 40–50% of people who are HIV positive have oral fungal, bacterial, or viral infections.

Access to oral care is a global problem, particularly in low-to-middle income countries. The workforce available to treat the most common oral health problems—dentists—are in short supply in these nations. Whereas countries such as Germany and the UK have one dentist per 1000 population, low-income and middle-income countries have one dentist per 50 000 people, and in some sub-Saharan African countries the ratio is one per 900 000 people. Dentists also cluster in cities where populations that can afford treatment usually live, leaving rural areas deprived of even the most basic emergency dental care.

But training more dentists and building dental clinics—the western curative model of care—is costly and unrealistic in most low-income and middle-income countries. Prevention of oral disease is therefore key, largely possible, and should be a routine part of other health professionals' work.

What can be done? The daily use of fluoride is the most cost-effective, evidence-based approach to reduce dental decay. Water or salt fluoridation are possible population-wide approaches but their implementation depends on

the development and infrastructure of the country as well as political will and community acceptance. Promoting the daily use of effective fluoride toothpaste is a more realistic strategy but its cost prohibits its widespread use in many low-income and middle-income countries. Governments can remove taxes on fluoride toothpaste, which in some countries represent up to 50% of the product's price, and they can work with manufacturers to produce lower cost toothpaste. In the Philippines, for example—where 97% of schoolchildren aged 6 years have dental caries—a programme that combines the promotion of daily handwashing with soap, tooth brushing with subsidised fluoride toothpaste, and twice-yearly deworming, is proving effective, affordable, and sustainable at US\$0.56 per child per year.

Policies that address the risk factors for oral diseases, such as intake of sugars and tobacco use, can also be implemented, especially because these moves will help reduce chronic diseases. Oral diseases and chronic diseases, such as cardiovascular diseases, cancer, chronic respiratory diseases, and diabetes share many common risk factors. In 2007, a World Health Assembly resolution called for oral health to be integrated into chronic disease prevention programmes.

Promoting good oral health could also help countries to achieve child-related development goals. Caries can negatively affect a child's ability to eat, sleep, and do school work. Preliminary studies have suggested that dental caries and related pain and sepsis might contribute to undernutrition and low weight and height in children in developing countries. In developed countries, studies show that when dental caries are treated, children start to put on weight and thrive. Oral pain is also one of the most common reasons for school absenteeism.

Preventing oral disease is important and achievable. Evidence-based, simple, and cost-effective preventive approaches exist, but they need to be rigorously promoted and implemented. Professionally, health workers, including physicians, nurses, paediatricians, and pharmacists can all deliver prevention messages about the use of fluoride and the risk factors for oral disease. Politically, commitment is needed to integrate oral disease prevention into programmes to prevent chronic diseases and into public-health systems. Good oral health should be everybody's business. ■ *The Lancet*

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For more on the Philippines school programme see *Development & Cooperation* 2008; 49: 8–12; <http://www.inwent.org/ez/articles/082726/index.en.shtml>