

Prevention, Prevention, Prevention

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Editor

In the last issue we included a commentary on the oral health findings of the Global Burden of Disease study.¹ This highlighted the fact that untreated decay in permanent teeth was the most prevalent global condition, with 35% of all ages affected. The impact that this disease has on children in particular is significant and yet it is one area in dentistry where we have good evidence of effective interventions.

Increasing the availability of fluoride is core to caries prevention (see Table 1 for summary of topical fluoride interventions) and supported by the WHO (http://www.who.int/oral_health/action/risks/en/index1.html) and the World Dental Federation (<http://www.fdiworldental.org/media/11319/Promoting-dental-health-through-fluoride-2008.pdf>).

In this issue we highlight two recent updates of Cochrane reviews of two particularly effective interventions, fissure sealants⁸ and fluoride varnish.² Both of the updates reaffirm the effectiveness of these interventions. Looking at child caries prevalence in many countries, it could be concluded that fluoride varnish is an underused intervention despite its increasing use for community based prevention programmes (eg Childsmile; www.childsmile.org). With the review suggesting that caries reduction of around 40% is seen even against background use of fluorides and baseline caries prevalence rates, we should be asking why we shouldn't use it for all patients rather than why we should. However, it is worth noting that the data from the new review show that fissure

Table 1. Summary of Cochrane Reviews on the effectiveness of topical fluoride interventions

Topical Fluoride	Number of studies	Total number of participants	Prevented fraction	95% Confidence intervals
Varnish ²	22	12,455	43%	30% - 57%
Gels ³	25	7747	28%	19% - 37%
Mouthrinses ⁴	36	14,600	26%	23% - 30%
Toothpastes ⁵	74	42,300	24%	21% - 28%
Toothpastes ⁶	75	73,684	23%	19% - 27%
Supplements (tablets, drops, lozenges or chewing gums) ⁷	11	7196	24%	16% - 33%

sealants are more effective than fluoride varnish, even if not regularly monitored and maintained, as they should be.

The UK Departments of Health Preventive Toolkit⁹ and the Scottish Clinical Effectiveness Programmes guideline on the prevention and management of caries in children¹⁰ both took the view that everyone should be routinely provided with standard prevention advice, with those at increased risk getting enhanced prevention including additional fluoride. If we are to have a significant and continuing effect on reducing the pain and suffering from caries we should all be actively using these evidence-based caries prevention approaches.

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