# LETTERS TO THE EDITOR

Send your letters to the Editor, British Dental Journal, 64 Wimpole Street, London, W1G 8YS Email bdj@bda.org. Priority will be given to letters less than 500 words long. Authors must sign the letter, which may be edited for reasons of space. Readers may now comment on letters via the BDJ website (www.bdj.co.uk). A 'Readers' Comments' section appears at the end of the full text of each letter online.

# ORAL HEALTH

## Spitting evidence

Sir, in a letter J. Hartley wonders where the evidence for 'spit don't rinse' after toothbrushing originates (BDJ 2014; 217: 206). A previous article in the BDJ explains this well.1 As long ago as 1992 there was evidence of caries reduction if fluoride toothpaste was not rinsed off.<sup>2</sup> In this study a 6% reduction in caries incidence was found and later studies have shown a larger reduction of up to 16%. Dr Hartley mentions a case in America where ingestion of excess fluoride was a problem. This is easily avoided by using only a pea-sized blob of toothpaste. It has been recommended to rinse with a small amount of water,3 but the most widely accepted advice is indeed to 'spit not rinse'. *Delivering better oral health* states that there is grade 4 evidence to support it, ie evidence from well-designed, nonexperimental studies from more than one centre or research group.4 This has been taught to many dental nurses on fluoride varnish courses and to avoid confusing our patients it is important that our advice is evidence based, and consistent. I hope that this helps.

M. Wanless, by email

- Pitts N, Duckworth R M, Marsh P, Mutti B, Parnell C, Zero D. Post-brushing rinsing for the control of dental caries: exploration of the available evidence we should give our patients. *Br Dent J* 2012; 212: 315–320.
- Chesters R K, Huntington B, Burchell C K, Stephen K W. Effect of oral care habits on caries in adolescents. *Caries Res* 1992; 26: 299–304.
- Ashley P J, Attrill D C, Ellwood R P, Worthington H V, Davies R M. Toothbrushing habits and caries experience. *Caries Res* 1999; 33: 401–402.
- Department of Health. Delivering better oral health: an evidence-based toolkit for prevention, 2nd ed. BASCD/Department of Health, 2009.

DOI: 10.1038/sj.bdj.2014.1057

#### Integral to oral hygiene

Sir, J. Hartley, in a letter published in *BDJ* volume 217 no. 5, asks 'where this new advice, "Spit don't rinse", is coming from'.

In their paper, The influence of toothbrushing and post-brushing rinsing on caries experience in a caries clinical trial (Community Dent Oral Epidemiol

# **SEE RUSKIN**

Sir, I read the letter from S. Ward<sup>1</sup> with a heavy heart but no great surprise. My own response to similar queries as to the price of my services was to point the patient – and I still regard them as patients – to the writings of John Ruskin:

'There is nothing in the world that some man cannot make a little worse and sell a little cheaper, and he who considers price only is that man's lawful prey.' If Mr Moyes insists that we no longer have patients but customers, how long will it be before we have the equivalent of supermarkets selling horsemeat labelled as beef?

Professional healthcare is not and can never be retailing and if Mr Moyes and the GDC believe that it should, they should not be regulating a profession.

J. Walker, by email

1. Ward S. Unbelievably arrogant. *Br Dent J* 2014;

DOI: 10.1038/sj.bdj.2014.1059

1998; 26: 406-411), Chestnutt I G, Schafer F, Jacobson A P and Stephen K W reported the beneficial effect on caries increment of spitting rather than rinsing after toothbrushing with a fluoride toothpaste. These authors recommended that the 'spit don't rinse' message should be integral to post-brushing oral hygiene instructions.

D. R. McCall Dalbeattie

DOI: 10.1038/sj.bdj.2014.1058

## Toothbrushing evolution

Sir, I read with interest the recently published paper on toothbrushing (*BDJ* 2014; 217: E5). However, I was disappointed that the authors were rather selective in their literature review and somewhat failed to convey the well-documented evolution in toothbrush technology and toothbrushing methods that has occurred over the past 20 years.

In 1998, a European Workshop on Mechanical Plaque Control published a comprehensive review of methods of toothbrushing<sup>1</sup> and reiterated the statements from the 1986 World Workshop<sup>2</sup> that 'improvement in oral hygiene is not as dependent upon the development of better brushing methods as upon improved performance by the persons using any one of the accepted methods'.

In addition, Beals *et al.*<sup>3</sup> evaluated the brushing techniques of adults in three separate geographic regions using video recordings and reported that in an

average brushing time of 46 seconds, a combination of three basic movements was used, with the horizontal scrub being employed nearly 70% of the time – in line with other published studies.<sup>4</sup>

Based on the available research Löe concluded in his Millennium Lecture at EuroPerio in 2000<sup>5</sup> that in order to enhance plaque control the time had come to consider new toothbrush technologies and ways to simplify oral hygiene procedures. Towards this end, the cross-action manual toothbrush was developed with the intention of designing a toothbrush which could enhance plaque removal when used with a horizontal natural brushing technique. A 16° bristle angle was demonstrated to improve interproximal penetration, resulting in a significant increase in plaque removal.

A recent systematic review on the efficacy of manual toothbrushes by Slot *et al.* reported that 'clinical studies have consistently demonstrated that a brush with an angled bristle tuft configuration is significantly more effective.' Contemporary power toothbrushes are proving to be even more efficient in removing plaque, specifically brushes with an oscillating rotating head, which have been consistently shown in a Cochrane systematic review and two subsequent updates 9 to be more effective than manual brushes in removing plaque and reducing gingivitis in both the short- and long-term.

L. Mackenzie, by email