We think, however, that holistic care is not sufficient as the health system should be rebuilt in the future as a new 'social system' which is integrated to provide values to patients. In 2015, an advisory panel appointed by the health minister of young experts in their 30s and 40s, developed a vision of health care: Health Care 2035.4 Sakata City (100,000 population) is a unique rural community in Japan, having a model with this point of view. Since 1980, a group of dentists (re-educating themselves and other dentists nationally to become 'oral physicians' rather than dental surgeons), hygienists, specialists, community nurses, school teachers and government officials have collaborated with the private sector, academic institutions and civil society. The group has gradually developed a new social system to enhance oral care in a holistic manner with an emphasis on the patients' values.5

Local industries have started to pay for preventive oral care, which benefits employees and their family members and enhances productivity. The group has developed a consortium with large companies to advocate and facilitate the continuum of quality care after patient transfers. The consortium has developed a cloud-based, people-centred health information system. This system integrates various personal data and facilitates a personalised approach to health promotion and disease prevention by empowering each individual to design their own life style, with an ambitious goal, namely 'KEEP 28' to keep all of your own teeth for your general and oral health even for a 100-year life span. In 2016, Sakata City legislated for a holistic approach to oral care,6 obviously being influenced by these activities of the group. Professor Wilson's proposed advancements in oral health along with the Health Care 2035 vision are already taking place in a rural town in Japan.

T. Kumagai, N. Kumagai, M. Nishi, K. Shibuya, by email

- Reich M R, Shibuya K. The future of Japan's health system sustaining good health with equity at low cost. N Engl J Med 2015; 373: 1793–1797.
- Wilson N. Holistic care should be coming your way. Br Dent J 2017: 223: 568–569.
- Committee on the Future Vision and Work Style Reform in Health Care. Tokyo: Ministry of Health, Labor and Welfare. April 2017. Available at: http://www.mhlw.go.jp/stf/ shinqi2/0000160954.html (accessed December 2017).
- Japan Vision: Health Care 2035. Tokyo: Ministry of Health, Labor and Welfare. June 2015. Available at: http://www. mhlw.go.jp/seisakunitsuite/bunya/hokabunya/shakaihoshou/hokeniryou2035/future/ (accessed December 2017).
- Preventive medicine changes your life (In Japanese).
 December 2016. Available at: http://www.ashita-lab.jp/

special/7424/ (accessed December 2017).
6. Legislation to promote teeth and oral health care. Sakata City (In Japanese). March 2016. Available at: http://www.city.sakata.lg.jp/jyorei/act/frame/frame110001932.htm (accessed December 2017).

DOI: 10.1038/sj.bdj.2018.9

Gerodontology

Denture loss in hospitals

Sir, with regard to the loss of dentures, nothing much seems to have changed over the last 20 years. The investigation by Mann and Doshi (*Br Dent J* 2017: 223: 435–438) of denture loss in hospitals in Kent, Surrey and Sussex concludes that consideration needs to be given by hospitals to find ways to reduce the number of dentures lost every year and stresses the financial burden on the NHS.

They are indeed correct in their conclusions but it should also be noted that whilst this is annoying for the staff and a financial burden to the NHS it is also of greater consequence, and can be quite distressing, to the patient. This is especially true for the elderly who are usually less adaptable and have difficulty in learning to control new dentures.

I wrote an article for the *Nursing Times*¹ in which I pointed out that the internal referral records of a large university hospital showed that of 286 consultations for denture problems over 30 months, 79 were because of lost dentures. The age range for this group was 24–100 and most were from geriatric and psychogeriatric wards, although a number had been misplaced in general wards and in casualty and the radiology department.

The importance of marking dentures with the patient's name or code number is often not appreciated. Although it is not possible to say how many of the dentures misplaced in hospital could be returned to their owners if the dentures had been marked, those found in ward bathrooms or returned from the laundry after being discovered in pyjama pockets or among sheets certainly could be. Ideally all dentures should be marked in the laboratory during construction but if not temporary marking can be done on admittance to hospital using a denture marking kit or at the simplest level, with a permanent marker pen. A simple denture marking system was described in 1986.2

A. Harrison, Bristol

- Harrison A. Denture care. Nursing Times 1987: 83: 28–29.
- Harrison A. A simple denture marking system. *Br Dent J* 1986; **160:** 89–91.

DOI: 10.1038/sj.bdj.2018.10

Smoking

Developing the evidence base

Sir, we read with interest the 'Perspectives' feature published on the occasion of the ten-year anniversary of the smoke-free legislation in England. We enjoyed reading the personal views of dental professionals on this topic, including those who were working before and after the smoke-free legislation came into effect. It was very encouraging that they all advise patients to stop smoking and warn them of the negative impacts of smoking on oral health.

However, there is a clarification to the article that we think is important to make. The feature states that 'The smoking ban has since been extended to cover the use of electronic cigarettes'. This is incorrect. The smoking ban was introduced, after much debate, on the basis of well-established evidence of the harms of second-hand smoke, which is not the case for electronic cigarettes (e-cigarette) vapour. There are voluntary restrictions on the use of e-cigarettes, but the smoke-free legislation does not cover e-cigarettes anywhere in the United Kingdom (UK). Indeed, Public Health England (PHE) and Action on Smoking and Health (ASH) have produced useful guidance on this, which encourages organisations to develop evidence-based policies to the benefit of public health.2,3

Many NHS organisations have followed this guidance with e-cigarette use being allowed in some NHS grounds and in certain circumstances inside buildings (eg single occupancy bedrooms in inpatient mental health settings).

The feature also mentioned the role of e-cigarettes in smoking cessation on several occasions and this has been previously discussed in a *BDJ* letter earlier this year, which highlighted that e-cigarettes have been effective in helping smokers in England to quit.⁴

With respect to the standardised packaging of tobacco (SPoT), the UK was the second country in the world to introduce this, after Australia. The move was evidence-based with government commissioned systematic reviews of over 50 studies^{5,6} and an independent review⁷ concluding that SPoT would 'lead to a modest but important reduction [in smoking] over time'. It is important to put SPoT into context; it's not going to single-handedly eradicate smoking, but it is an important component of a comprehensive tobacco control strategy, and may be particularly

UPFRONT

important for youth smoking prevention. Interestingly, the strength of the tobacco industry's (failed) legal challenges to SPoT, in the UK, indicate their views on the potential impact to their business.⁸

Pictorial health warnings are also an important tool in a comprehensive tobacco control strategy. To date, more than 100 countries have passed legislation implementing this highly cost-effective tool.⁹

In a recent review, the UK ranked 14th globally for its warning size of 65% of the packaging's front and back surface (along with all other EU countries).⁹

Finally, surveys of the public perception of harm from e-cigarettes (and nicotine replacement therapy) indicate increasingly negative views, with only 13% of people (in 2017) considering e-cigarettes to be a lot less harmful than smoking. O Some of this is attributed to misconceptions around perceived harm from nicotine, which although highly addictive is not a significant health hazard on its own delivered in forms other than combustible tobacco. There are clearly mixed views amongst dental professionals and over the coming years we need to continue to develop the evidence base to best inform our patients and ourselves.

R. Holliday, D. Arnott, P. M. Preshaw, L. Bauld, by email

- Quinlan K. Perspectives: 'Patients with 40-60/day habits are now few and far between'. Br Dent J 2017; 223: 468–471.
- Use of e-cigarettes in public places and workplaces. Advice to inform evidence-based policy making. London: Public Health England, 2016, PHE publications gateway number: 2016129.
- Will you permit or prohibit electronic cigarette use on your premises? Five questions to ask before you decide. London: Action on Smoking and Health (ASH), 2015.
- Holliday R, Preshaw P, Bauld L. Smoking cessation: The role of e-cigarettes. Br Dent J 2017; 222: 3.
- Moodie C, Angus K, Stead M, Bauld L. Plain Tobacco Packaging Research: An Update. Stirling, Scotland: Centre for Tobacco Control Research, Institute for Social Marketing, University of Stirling, 2013.
- Moodie C, Stead M, Bauld L. Plain tobacco packaging: a systematic review. Stirling, Scotland: Public Health Research Consortium, University of Stirling, 2012.
- Chantler C. Standardised packaging of tobacco. Report of the independent review undertaken by Sir Cyril Chantler. London: King's College London, 2014.
- Royal Courts of Justice. Case Numbers: CO/2322/2015, CO/2323/2015, CO/2352/2015, CO/2601/2015, CO/2706/2015. London: High Court of Justice, Queen's Bench Division. Administrative Court. 2016.
- Cigarette Package Health Warnings: International Status Report. Fifth Edition. Canada: Canadian Cancer Society, 2016.
- ASH Fact Sheet. Use of e-cigarettes (vapourisers) among adults in Great Britain. London: Action on Smoking and Health (ASH), 2017.
- E-cigarettes: an evidence update. A report commissioned by Public Health England. London: Public Health England, 2015, PHE publications gateway number: 2015260.

DOI: 10.1038/sj.bdj.2018.11

Cariogenicity of e-cigarettes

Sir, electronic cigarettes (e-cigarettes) have been a popular topic of discussion recently. Their relationship with periodontal disease has been a particular area of interest within the dental field. However, they may also pose a risk for another major oral health problem, dental caries.

An electronic cigarette is a device which utilises the heating of a solution or 'e-liquid' to release a vapour. Initially devised as a means to deliver nicotine to a smoker in a familiar method to which they are accustomed, the concept was developed with the introduction of a plethora of flavoured 'e-liquids'.

The e-liquids contain a mixture of various chemicals including sucrose,² aqueous glycerine and artificial flavourings.³ This cariogenic substrate is delivered to the oral cavity as an aerosolised vapour.

Furthermore, the introduction of flavoured e-liquids, as well as zero-nicotine levels, has now also attracted non-smokers to the use of e-cigarettes as a recreational activity. 'Vaping' has become especially popular with teenagers and young adults, often involving prolonged sessions of continuous use lasting numerous hours.

I would propose that the cariogenicity of flavoured e-liquids could be an area of further research. Furthermore, it could be particularly beneficial to work together with manufacturers to develop less cariogenic 'e-liquids', using alternative ingredients.

S. Umerji, Liverpool

- Wadia R, Booth V, Yap H F, Moyes D L. A pilot study of the gingival response when smokers switch from smoking to vaping. Br Dent J 2016; 221: 722–726.
- Kubica P, Wasik A, Kot-Wasik J, Namie-nik J. An evaluation
 of sucrose as a possible contaminant in e-liquids for
 electronic cigarettes by hydrophilic interaction liquid
 chromatography-tandem mass spectrometry. *Anal Bioanal Chem* 2014; 406: 3013–3018.
- Callahan-Lyon P. Electronic cigarettes: human health effects. Tob Control 2014; 23(Suppl 2): ii36–ii40.

DOI: 10.1038/sj.bdj.2018.12

Primary dental care

Rubber dam, feather fingers and reflection

Sir, like Keith Marshall (*You're not serious*, *BDJ* 2017; **223:** 552) I was a rubber dam addict: so much easier for patient, dentist and dental nurse. My patients also fell asleep and sometimes I needed a small prop to keep the mouth open as it could close while they slept and this seemed better than waking them with a request to open. One patient who was

a professor of physiology was routinely asleep, but on one visit was uncharacteristically eyes open, wide awake. He later explained he was trying to work out why, with rubber dam on, he felt I was not working on him. This seems important, perhaps worthy of research. Could it partly explain why for nervous patients, rubber dam seemed so helpful? Roger Beetles' feather fingers (*A gentle touch, BDJ* 2017; 223: 552) may also aid sleep. I hope this can be taught/developed but maybe it is mainly a gift. Again, a great topic for research!

I so enjoyed your Reflection Editorial (BDJ 2017; 223: 549), triggered by the celebration of 50 years in Wimpole Street, although as a student at the Royal in the 1960s I can confirm plaque was identified as the cause of periodontal disease and all local anaesthetics were given with disposable needles. The Queen's address on the opening of the building showed she was well aware a good dentist could reduce operative work by encouraging self-care by the patient. Her dentist, with rooms close to BDA headquarters and a practice predicated on prevention, may explain her knowledge. This makes your final paragraph all the more important. You hit hard about: 'the prolonged and disastrous reign of the Unit of Dental Activity as part of the defunct NHS Dental Service, the ineptitude of the discredited and disbanded GDC as an out of touch regulator...' This was for me an appropriate reflection on the two worst things to befall dentistry in my 50 years.

E. Kidd, by email

DOI: 10.1038/sj.bdj.2018.13

Dental radiography

Root dwarfism

Sir, the case described in the letter *Dental radiography: short roots* (*BDJ* 2017; **223**: 464) seems to be a case of SRA (short root anomaly), a rare disease. It can be idiopathic, a result of radiotherapy or chemotherapy in childhood, or hereditary. It is also known as root dwarfism. Further information is available in the literature.^{1,2}

M. Fechine, Brazil

- Valladeres Neto J, Rino Neto J, de Paiva J B. Orthodontic movement of teeth with short root anomaly: Should it be avoided, faced or ignored? *Dental Press J Orthod* 2013; 18: 72–85.
- Bansal S, Bansal P, Gupta A. Generalized severe short root anomaly: A diagnostic dilemma. *Indian I Oral Sci* 2015; 6: 88-92. Available at: http://www.indjos.com/ article.asp?issn=0976-6944;year=2015;volume=6;issue=3;spage=88;epage=92;aulast=Bansal (accessed December 2017).

DOI: 10.1038/sj.bdj.2018.14