England and Wales, 7% of 15-year-olds had four teeth extracted, 6% had two teeth extracted and 2–3% had one tooth extracted.

In our previous paper,¹ we did note the problems with analysing trends due to changing methodologies in the surveys but that for 12- and 15-year-olds, the impact was likely to be minimal. It does therefore appear that the proportion of 15-year-olds who have had extractions for orthodontic treatment has decreased over the last ten years, despite a relatively constant number of 12-year-olds undergoing orthodontic treatment at the time of the survey (8-9%) and an increase in the number of 15-year-olds under treatment from 14% to 18%.³⁴

C. R. Vernazza, J. J. Murray, Newcastle

- Murray J J, Vernazza C R, Holmes R D. Forty years of national surveys: an overview of children's dental health from 1973-2013. *Br Dent J* 2015; **219**: 281-285.
- Todd J E. Children's dental health in England and Wales in 1973. London: HMSO, 1975.
- 3 Lader D, Chadwick B, Chestnutt I et al. Children's dental health in the United Kingdom, 2003. London: The Stationery Office, 2005.
- 4 Office for National Statistics. Social Survey Division. (2015). Children's Dental Health Survey, 2013. [data collection]. UK Data Service. SN: 7774, http://doi.org/10.5255/ UKDA-SN-7774-1 (accessed February 2017).

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Dental radiography

Vanishing implant

Sir, having undergone successful treatment for a squamous cell carcinoma of the anterior mandible and lower lip, a patient was now ready for the restorative phase of treatment. The surgery left her edentulous in the lower jaw and in need of some form of prosthesis. She was given a number of options for her treatment and upon discussion with the team, decided to have an implant retained lower complete denture.

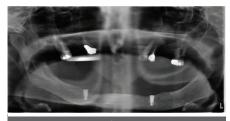


Fig. 1 Only two implant fixtures are seen



Fig. 2 The third implant magically reappears

Subsequently, she had three implant fixtures placed into her lower jaw under general anaesthetic and this was completed without complications. Having returned for a follow up appointment, a dental pantomogram (DPT) was taken to review the position of the implant fixtures (Fig. 1). The image shows the presence of only two implant fixtures, with the central fixture missing, which led to questions as to what had happened to it. The patient explained that she was completely oblivious to it all and had not noticed anything drop out of her mouth. One month later, she returned for a further follow up to review her implant fixtures, as well as her oral candidiasis. A new DPT was taken (Fig. 2) now with the middle implant fixture clearly visible!

This acts as a reminder of a number of key areas with regards to dental radiography. Firstly, ensuring the radiograph is taken appropriately, including the preparation of the patient and the machine and the appropriate positioning of the patient. Secondly, taking care when combining what is known clinically with what can be seen radiographically to form an overall impression. Finally, it raises the question as to whether periapical views should be taken in addition to DPTs in such instances.

(With thanks to Mr Neil Macmillan and Mr Nick Lewis.)

Y. Twaij, by email DOI: 10.1038/sj.bdj.2017.248

Dental education

Oral biology teaching

Sir, the recent spring meeting of the Association of Basic Science Teachers in Dentistry (ABSTD) brought together oral biology teachers including professors emeritus and heads of school, module leads and lecturers involved in front-line teaching, and was themed around a conversation on the current status of oral biology teaching. Despite a diversity of opinion, each speaker, independently and in their own distinctive way, raised two concerns. Firstly, the loss of scientific rigor in many contemporary oral biology courses and secondly, the lack of engagement and low levels of curiosity amongst students often associated with this topic area. The causes are complex, but may involve shortage of faculty with appropriate expertise, increased competition for teaching time, the eclipsing of basic sciences by clinical topics in contemporary, integrated curricula and inadequate guidance in documentation from regulatory bodies.

UPFRONT

Basic science, and oral biology in particular, provide a foundation for clinical studies. If lost, much of the understanding which underpins dentistry will be damaged which will, in turn, impact on the ability of new graduates to deal with complex situations, to respond to change and technical advance, and ultimately on the quality of dental care. Therefore, we must extend this conversation to the whole profession and campaign for a reassessment of the scientific rigor of many dental courses to ensure that the dental degree continues to retain its status as a widely respected, scientifically based professional qualification.

> J. Bennett, President, Association of Basic Science Teachers in Dentistry, Plymouth DOI: 10.1038/sj.bdj.2017.249

Outreach teachers essential

Sir, the recent research paper by Parrot, Lee and Markless (*BDJ* 2017; **222:** 101–106) demonstrates yet again the need for, and special skills required to be, a clinical teacher in a dental outreach setting and the authors are to be congratulated on highlighting this issue.¹

The essential requirement of being 'clinically competent' in a clinical teacher is clear to all parties. However, it is also clear from their paper that students think that a teacher's characteristic of being 'available, receptive and supportive' is of greater importance than the teachers themselves do.1 Our own research at the University of Portsmouth Dental Academy (UPDA) indicates that students are empowered to be independent practitioners in an environment which treats them as colleagues to be supported, rather than simply recipients of the teachers' expertise.² The need for clinical teachers to be aware of the difference between the academic teaching of the dental school and the realities of primary care/ outreach teaching should form an essential part of the training and preparation for their role in outreach education.

However, we have previously highlighted the logistical difficulties and financial costs of providing such preparation and training for part time clinical teachers in an outreach setting.^{3,4} Part-time teachers frequently have other regular commitments, meaning not all teachers can attend on one training or induction day. The training then has to be repeated until all have attended. Time off from their teaching commitment for training involves the costs of providing staff cover. UPDA is exceptionally well supported by both its parent universities (University of