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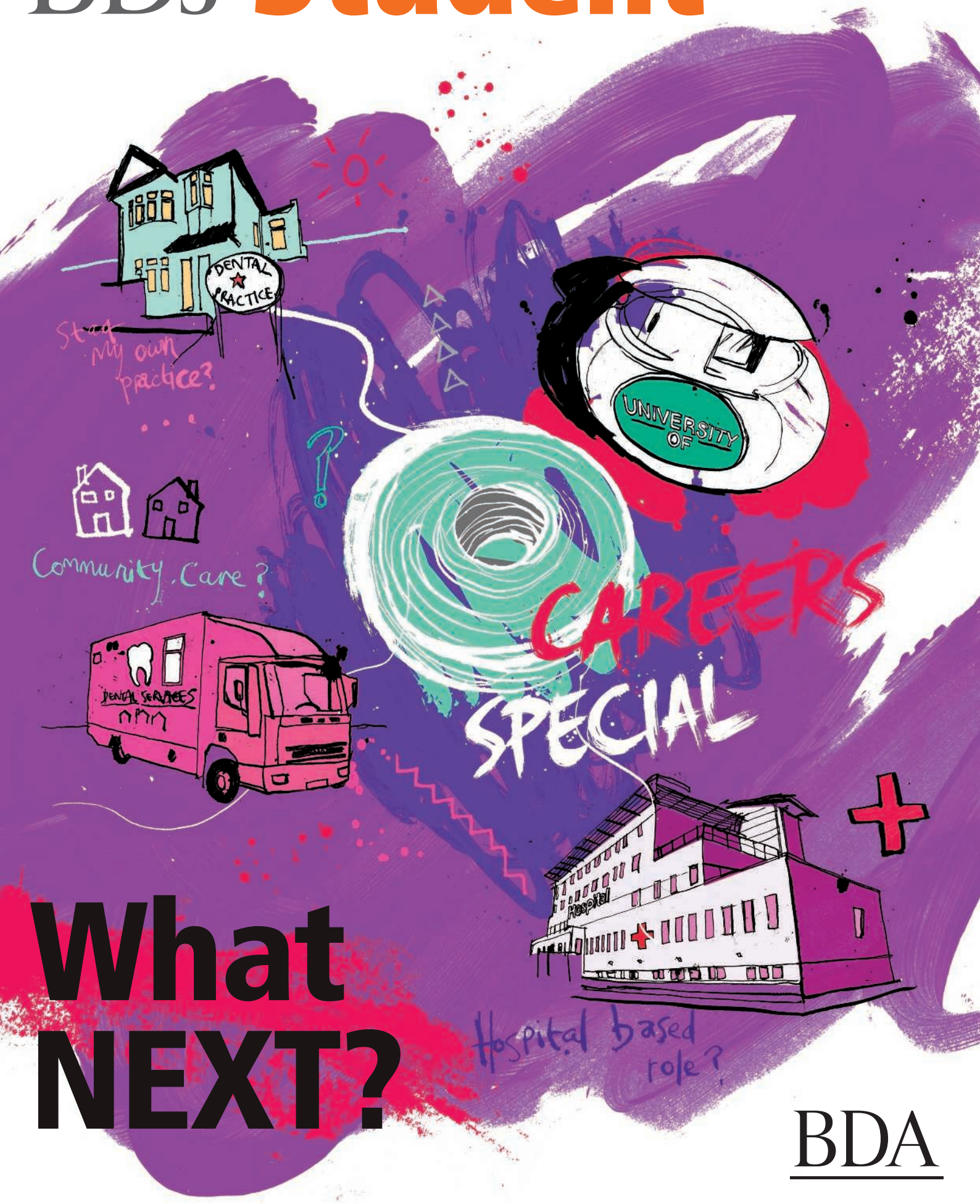

What NEXT?

BDA

Peninsula dental school ■ Autism spectrum disorders ■ Revision questions ■ Regional dentistry

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References:
1. Bleeding Index Reduction DOF 1 – 2013 (LAEBBA0001), 50.9% reduction in whole-mouth mean Bleeding Index at 4 weeks.
2. DOF 2 – 2013 (UNKPLT0006).

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Advanced Defence against gum disease

BDJ Student

the British Dental Association's official magazine for students and first year graduates

SPRING 2015

CAREERS SPECIAL

09

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UPFRONT

PROFESSIONAL

BRIEFING

CLINICAL LIFE

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CAREERS SPECIAL EDITORIAL

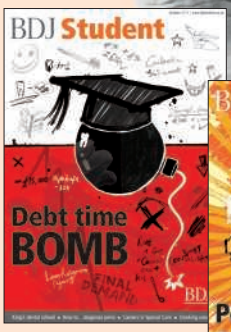
Julie Ferry,
BDJ Student
editor

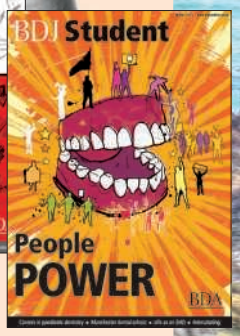
Bex Stockton,
BDJ Student,
student editor

What next? It's a question that has been preoccupying the *BDJ Student* team over the past few months. As the academic year draws to a close, it seems the perfect time to consider where a career in dentistry could take you. That's why we've devoted a large proportion of this issue to the subject. In these pages you will find a regional dentist who spends her time travelling between practices; a Longitudinal Dental Foundation Trainee who has embarked on an unconventional way of ensuring she has both practice and hospital experience; and two students determined to become Oral and Maxillofacial Surgeons. Coupled with advice from our resident DCT1 columnist, Nasar Mahmood, and advice on how to treat patients on the Autism Spectrum, we think we've got a lot of bases covered. Of course, there are so many options in the profession for dental students and we will continue to bring you information and advice on as many of them as possible, but we hope that, for the time being, this careers special will keep you busy and informed. And for those not yet thinking about what's next, *BDJ Student* will once again guide you through tough ethical dilemmas, revision questions, how-to clinics and all the latest news and reviews, not to mention a peek behind the scenes at the Peninsula Dental School.

And if you're impressed with this issue (and we hope you are!) and would like to be a part of *BDJ Student*, go to page 8 to find out how you can become our next student editor. We'd like to say a big thank you to our current student editor, Bex Stockton, who has done amazing job. She'll be a hard act to follow, but if you think you can, please don't hesitate to get writing. We'd love to hear your views. **Julie Ferry** ■

Hello and welcome to the Spring edition of *BDJ Student*, the last of the academic year, and sadly also my last as student editor. I hope you've all got lovely plans for the summer; I'll be doing an elective this year if all goes to plan! I'm Bex, a fourth-year student at Manchester, and since taking up this post two years ago as student editor of our previous title, *Launchpad*, I've been thrilled to play a small part in launching and establishing *BDJ Student* as an essential read. I may be biased but I think the new magazine is brilliant and packed full of useful information to prepare us for life beyond dental school. However crammed our ever-expanding timetables get, time reading this magazine is never wasted.





By becoming a member of the BDA, we've not just bought a magazine subscription but joined a trade union with the authority to fight on behalf of the profession for fair pay and treatment – even when that means taking the General Dental Council (GDC) to court! The fight is continuing to make sure healthcare regulation is a hot topic that is on the parliamentary agenda leading up to the General Election.

Congratulations are in order to those of you in the final year with scheme allocations already in the bag. Those on the reserve list, take comfort in the fact that the BDA helped ensure all eligible UK graduates had a Dental Foundation Training (DFT) place in 2014. You've come this far and worked so hard already - best of luck to all of you in your exams and your future careers.

As I prepare to pass the baton to the next student editor, I have reflected on my experiences over the past two years on page 8. I owe the editor a great deal of thanks for her advice and her patience over that time. I have thoroughly enjoyed my stint as student editor and I'm sorry to be leaving the post. To the next person to take the baton, I hope you enjoy it as much as I have done and wish you the very best of luck. **Bex Stockton** ■

NEW APP

NEW FOR 2015 – THE BDA CONFERENCE APP

The BDA is excited to launch a specially designed app for this year's conference. Suitable for all Android and Apple mobile devices it will help you make the most out of the event.

Now available to download from the App store or Google Play, the app will enhance your experience at the event. Navigate the venue and exhibition and find sessions with interactive maps so hopefully you won't get lost! Delegates can also sign up to event notifications to receive important messages throughout the event.

A really useful benefit for student attendees is the ability to create and build your own conference timetable. Select the sessions that appeal to you and simply add to your own personalised timetable.

Make sure to add these key sessions for young dentists:

- Discussion session: *The future for young dentists: aspirations, challenges and how to compete in a changing profession* – **Mick Armstrong, Chair, Principal Executive Committee, BDA** and other panellists
- *Making the most of your career in dentistry* – **Nick Lane, GDP, Wakefield**. A career case study that may help you decide your career path
- President's lecture: *A career in dentistry: a journey of opportunities, challenges and lifelong learning* – **Nairn Wilson, CBE, President, BDA**. Find out how you can succeed in dentistry in this inspirational session

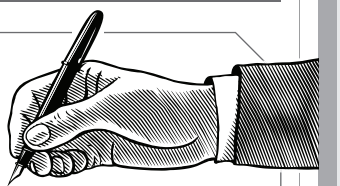
Don't forget you can also add your voice to the event. From the app you can log into Facebook and Twitter and share your views on sessions, speakers and the exhibition.

Conference Passes are FREE for BDA Student members

The event is FREE for all BDA Student members, so join hundreds of your friends and colleagues at the biggest event for dentistry. Register for your free place online www.bda.org/conference or call the registration team on 0870 166 6625.

Check the conference website and follow us on twitter for the latest conference news and updates:
www.bda.org/conference | @BDAevents | @BDAconference

Interested in dental journalism?



If you'd like to find out more about submitting papers and articles to peer reviewed journals and would like to improve your chances of getting your work accepted, then you might be interested in the BDEF Workshop for New Authors. The workshop is taking place on Tuesday 8 September 2015 at the British Dental Association and costs £40 for delegates. The programme will cover the peer-review process, publication ethics, plagiarism, how to follow journal guidelines and how to write for scientific journals. For more information email s.hancocks@bda.org.

BLOG IT

This issue's hot topic from BDA Connect, bdaconnect.bda.org.

How to get ahead at dental school

Charlotte Leigh, a recent graduate of Leeds Dental School, gives her advice on how to get ahead at dental school

Dear Dental Student,
Welcome to dental school! You will spend your next five years loving and loathing dentistry. It is only fair that as an older (and hopefully a little bit wiser) dentist, I share my knowledge. So here are a few things I wish I had known earlier.

Never ever let your patients go. The likelihood is that they will always need more treatment. There are some patients who have followed students all the way through their dental careers, starting from junior perio all the way to complex cons. If your patient is on time and lives locally, never ever let them go!

Make friends with the nurses and dispensary staff. The scenario which you fear will inevitably arise. There will be an afternoon clinic with a nightmare patient, a stressed tutor and you will suddenly find you have run out of impression handles/burs/materials. The nurses can make you run around the hospital yourself to try and find it or, if you are nice, they usually help out and make your life much easier.

Prepare for your clinics. When the tutor ends your session with, "Read up about XYZ and make sure you know what you are doing next time," DO IT. Do not try and think you can wing it. It looks unprofessional, you get stressed that you are wasting the patient's time and the tutor ends up being disappointed in you. Bad move.

Never moan about having too many patients! There will be a time when all the waiting-lists dry up, your most loyal patient will get ill and another three will all decide to take a holiday. Then you will be glad that you have a few more patients up your sleeve. It takes practice to juggle patients effectively and make progress on their treatment plans, but it is something you will have to do regularly once you graduate.

Get good at giving injections. You will rarely have an appointment where you do not need to give a local anesthetic, so know your anatomy.

Get involved in societies outside the dental school. In the fourth and fifth year all your non-dental friends will graduate and leave you still at uni (boo hoo). This gives you more opportunity to concentrate on your work. However if you still have friends around outside the dental bubble and have cultivated a hobby this is a great escape! It also looks great on your CV.

Join the British Dental Association (BDA). They are your trade union and do loads of important things to help our profession – including fighting to protect graduate salaries and funding for graduate jobs. In 2014 they fought against a proposed £2000 pay cut for new graduates and won!

The BDA also provide some really good resources to help you with your studies. The elibrary is my fave. Being able to **download textbooks for free** has saved me loads of money over the years. Reading the ***British Dental Journal (BDJ)*** and ***BDJ Student*** keeps me in touch with the dental world outside uni. Membership also gives a discount on the British Dental Students Association's (BDSA) **conference and sports day** – national dental student events that are not to be missed! It's only £2 a month to join and well worth it. Find out more at www.bda.org/studentjoin.

And finally… enjoy yourself, it is all over far too quickly!
Dental love,

Charlotte x

WORKING FOR YOU

The BDA has over 30 committees, each dealing with a wide range of issues. From general practice and the community dental service to salary levels and regulatory requirements, they are at the forefront of dental politics, representing BDA members on key issues that affect their careers. In this regular column, *BDJ Student* finds out more about what really happens at the heart of your trade union. This issue we ask **Mick Armstrong**, Chair of the Principal Executive Committee, to explain a little about its role

The Principal Executive Committee (PEC) is the senior committee of the BDA. It is composed of 15 non-executive directors elected by our membership. From that 15, I had the honour to be elected as the current Chair; a post that is up for election each year.

The PEC is responsible for the direction, policy and strategy of the BDA. It gathers information widely from our many sub-committees and individual members, distilling it into a coherent plan and instructing the BDA's chief executive officer and senior management team to implement that strategy as effectively as possible.

As Chair my role is to facilitate that process, and to take the lead when necessary. I don't deny it can be challenging: put a group of dentists in a room and they will often have quite a wide range of views, reflecting their specific professional background. The debates can be passionate and heated, but we all have a common goal, to make things better for the whole profession, and consensus is usually arrived at.

I also have the honour of delivering keynote addresses to both members and interested influential parties. I help represent the BDA at high-level negotiations across government, with the Department of Health, and our regulators. We share information widely with all these groups with the aim of building a better future for our profession. My role is demanding, I work around three days a week in London or going to meetings across the UK, so I can often be on the road. I also have to do a lot of background reading and emailing to keep on top of things and make sure I am briefed. I am well aware it is also important to keep an insight into the day job, too, so I try and work two days a week in my busy general practice in Yorkshire.

I find it a hugely interesting and fulfilling role, and I am immensely grateful to my colleagues for granting me the opportunity to do it. As dentists, we face many current challenges and threats to our professional lives. Often our members need the BDA to provide support, assistance and advice on a day-to-day basis, but also when the going gets tough, they rely on the BDA to take a stand on their behalf.

> 'The debates can be passionate and heated, but we all have a common goal, to make things better.'

Looking out for our youngest members is always a priority: the BDA's campaign to secure the Government's U-turn on foundation dentists pay was important to us. From the start, the PEC was determined to stand up for the next generation, and we were able to help mobilise the profession and make a difference to help young dentists' future careers.

But we can't make change happen without our members behind us. We are a not-for-profit organisation and every penny we take in subscriptions we give back to members with our services.

It's the PEC's role, and my personal determination, to see that money is spent wisely and those services are as effective as they can be. And it is my aim to demonstrate that we can be a formidable association when we work together. **Mick Armstrong** ■

STANDING UP FOR THE NEXT GENERATION

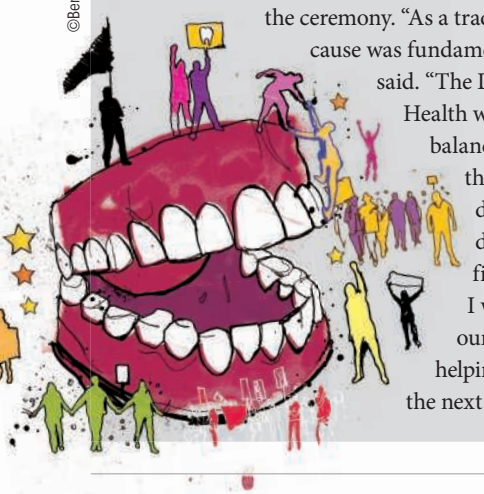
February saw the BDA gain recognition for its successful campaign defending Foundation Dentists pay at the Association Excellence Awards. Association members and staff were commended by judges for forcing the government to u-turn on plans for a £2,000 per year pay cut for young dentists setting out on their careers. The BDA beat stiff competition from other professional bodies to win 'Best Advancement of Cause'.

The government had announced its plans for cuts to Foundation Dentists' pay in April 2014. The BDA promptly kicked off an online campaign allowing dentists young and old to make the case for change. The BDA set out to communicate the risk of this cut to the entire profession, and then equipped supporters with the tools to put pressure on local MPs, NHS England and the government.

The centrepiece of the campaign was generating publicity for a government e-petition, which gathered more than 2,000 signatures in its first 24 hours. The campaign relied on many young members using social media, with supporters taking to Twitter and Facebook with signs saying: "We're the future of dentistry, not a funding cut".

These very visible calls from young dentists supported the BDA's direct lobbying efforts, which culminated in threatening the Department of Health with legal action. The BDA believed this policy was unfairly targeting young dentists who at the start of their careers, were already weighed down with, on average, £25,000 worth of debt and spiralling living costs.

BDA Chief Executive Peter Ward was on hand at the ceremony. "As a trade union this cause was fundamental to us," he said. "The Department of Health was setting out to balance the books off the back of young dentists. We were determined to fight their corner. I want to thank all our members for helping us stand up for the next generation."



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If you have any news, views or issues you'd like to see covered, tell the team at *BDJ Student* all about it.

Write to: BDJ Student, British Dental Association, 64 Wimpole Street, London W1G 8YS

Email: **bdjstudent@bda.org**

Tweet us: **@BDA**

LETTERS TO THE EDITOR

Dear Editor,

I was most interested to read the recent article, *Extraction of teeth for cultural reasons*, in the Winter 2015 *BDJ Student* magazine, particularly as I am a member of Dentaid's Action Group against Infant Oral Mutilation (IOM). www.dentaid.org

IOM is the traditional practice, dating back to as early as 1932 in the Nilotic Sudan, which is described in the paragraph *Tooth extraction in the Maasai*, and rather than being a ritual practice, it is carried out to prevent or cure diarrhoea, fever etc in infants.

IOM is still being practised in many African countries, often surreptitiously, as it is such an entrenched tradition. Dentaid has produced an IOM information leaflet designed to be given to health workers, teachers etc in these areas, available in English, French, Luganda and Swahili and these can be downloaded from the website.

For more information on IOM, visit http://www.dentaid.org/infant-oral-mutilation/ ?

There is an overview of all the published papers on IOM, at http://www.dentaid.org/iom-materials/

Dentaid provides funding for a team of Ugandan dentists to give regular clinics in rural villages, at which education about the dangers of IOM is given.

All the best,

Dr Rosemary Longhurst BDS
Dentaid Action Group against IOM Member
rlonghurst3@sky.com

REVIEWS: APP

My Notes: Tooth Morphology

My Notes: Tooth Morphology is an app designed to "get students on the fast track to tooth morphology". It is a brilliant idea on paper: a recourse intended to simplify and collate the fundamental principles of tooth morphology right at your finger tips, in the neat little nutshell of your smart phone.

The reality, however, is a confusing jumble of information on a clumsy, difficult-to-navigate interface. Have you ever borrowed your friend's revision notes in the hope of being enlightened by a different perspective, only to discover a cryptic nightmare; a smorgasbord of acronyms and truncations that your own brain is unable to digest? This app feels a bit like that!

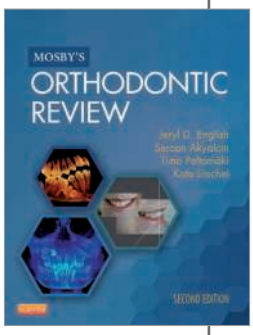
Don't get me wrong, there are some pretty handy features here and once you have managed to navigate to the tooth in question, the diagrams are pretty good, with superimposed geometric shapes clearing suggesting coronal form. There are some useful little nuggets of information under the 'description' tab and a very handy table of eruption, calcification and root-formation dates, which is certainly worth a screen shot for those moments of mental block on clinic.

I commend the idea behind this app, and I can only hope that in time it will be developed to the higher standards that are expected with a £2.49 price tag. In the meantime, I'll be sticking to my dog-eared Van Beek…

Annie Pellatt, third-year dental student, Peninsula ■

REVIEWS: BOOK

Mosby's Orthodontic Review (2nd ed), Jeryl D. English, Sercan Akyalcin, Timo Peltomaki and Kate Listchel, Elsevier Ltd, 2014



According to its preface, Mosby's Orthodontic Review is aimed at students preparing for the NBDE Part II and postgraduate dentists taking the American Board of Orthodontics (ABO) certification exams. Translated to British dental academia, this would mean finals exams and orthodontic-specialty training. It is therefore most definitely not a book aimed at the complete beginner.

Mosby's provides a comprehensive overview of orthodontic concepts and approaches to treatment with clear references to the evidence base for any recommendations made, although much of this evidence is based on the American population. I found the differences became apparent early. For example, dentists in the USA favour fixed functional appliances like the Herbst appliance, which are less common in Britain, where Twin Block appliances are preferred. However, both approaches were explained in detail. Also, as you might expect from American clinical literature, there is no mention of the IOTN - a crucial concept on our side of the pond - or of our NICE guidelines relating to extractions. Additionally, the distinction between the role of the GDP and of the orthodontist does not seem to be so clear cut in this book compared with other comparable books I have read, such as the invaluable An Introduction to Orthodontics by Laura Mitchell.

However, the book's strength is its attention to detail and attractive presentation. It has plenty of diagrams and case photography, some especially fascinating, such as a repaired cleft lip and palate case where a canine had erupted through the skin of the upper lip. And despite lots of very detailed text, it is arranged in a question and answer format occasionally reminiscent of a specialist-subject round on the BBC's Mastermind (e.g. When and by whom was the edgewise appliance introduced to the discipline of orthodontics?).

Mosby's will be useful for those of you with an interest in orthodontics at a postgraduate level, but I cannot recommend it for UK dental undergraduates. **Bex Stockton, *BDJ Student* Student Editor** ■

Fighting on your behalf

We have now officially launched our Student Manifesto, which outlines the policies for which your Student Committee is currently campaigning. It highlights areas where we believe changes should be made to improve the situation for dental students and ultimately patients.

Areas of particular focus include the need to agree a long-term solution to student loans and NHS bursary funding to minimise student debt on graduation. The provision of enough training places for all UK graduates at the beginning of their careers is also high on the agenda.

Visit www.bda.org/studentmanifesto to find out more.

BDJ STUDENT SEEKS **NEW** STUDENT EDITOR

It was the last few days of the summer holidays in 2013 (that lovely long one before going into the third year) and I was spending my time pottering around my home town, watching reruns of *Friends* and baking excessive amounts of teeth-unfriendly goodies. At some point when I picked up my already mostly read copy of *Launchpad* to flick through, I noticed they were advertising for a new student editor and spontaneously decided to apply. I am so glad that I did! Two years down the line, *Launchpad* has morphed into *BDJ Student*, I've become a nearly-fifth year (how did that happen?) and I am excited to announce that the post of student editor has, as of this issue, been newly reopened!

If you have an interest in writing, and an idea or two about articles you'd like to see in *BDJ Student*, I encourage you to contact the editorial team. You don't have to be the student editor to contribute to the magazine, though a regular post makes sure you're always in the loop, and the role comes highly recommended!

During my two years as student editor, I've conducted eye-opening interviews with specialists, tutors, new graduates and students; I've been asked to review websites, apps, and textbooks I'd never even heard of - some of which were absolute gems, like dentaljuce.com; and been given a certain degree of freedom to choose my own topics to write about. I've found myself taking photos and interviews at the BDA conference with a Press Pass around my neck, and I've even tried my hand at investigative journalism – contacting every UK dental school for data about the uptake of their intercalation programmes for the Winter 2015 edition.

> 'I've found myself taking photos and interviews at the BDA conference with a Press Pass around my neck, and I've even tried my hand at investigative journalism'

A real highlight of my time as student editor was being invited into a meeting of the MDSS Committee with Mick Armstrong, Peter Ward, and Paul Blaylock during March last year when the threat of a £2000 foundation year pay cut was looming. It really made me feel a part of a community and confirmed that the BDA is on our side as the issue important to students and newly qualified dentists was heard, understood, and acted upon.

If it all sounds like a lot of work, remember the schedule is designed to be understanding of dental students. Working to deadlines can be daunting, but I've found they have been far enough apart that I've never felt time pressured, making it easily possible to fit writing into an already heavy workload. It has been a great experience to add to my CV and it's had some great perks - I can't say I won't miss the freebies! So if you feel you'd like to be our next student editor, send in an application – you won't regret it! **Bex Stockton, *BDJ Student*, Student Editor** ■

Interested?

If you'd like to be *BDJ Student's* new student editor please email bdjstudent@bda.org outlining what you think are the three most important issues facing dental students. No more than 500 words long, this is your chance to show the team what you care about, how in touch you are with the student population and the profession and, of course, your lively and engaging writing style. Deadline is Friday 22 May. Good luck!

GDC FACES PARLIAMENTARY SCRUTINY

The BDA's campaign for effective regulation stepped up a gear in March, as the General Dental Council faced the House of Common's Health Select Committee for its first ever accountability hearing.

With damning evidence from bodies like the Professional Standards Authority and of course the BDA, the Committee, chaired by Dr Sarah Wollaston MP, asked very serious questions of the GDC.

Chair Bill Moyes, and, CEO and Chief Registrar Evlynne Gilvarry were held to account for the failings of the dental regulator.

At times answers were not forthcoming and more than once Committee members clearly lost patience with how ill-prepared the pair were for the inquiry. Indeed, Committee member Grahame Morris MP noted "very valid concerns" over the GDC not having figures for the Committee, continuing "they've had plenty of time to prepare".

It was perhaps unsurprising, that after a nightmare year for the hapless regulator, members of the Committee, most notably Robert Jenrick MP, asked if Moyes and Gilvarry should consider their positions and resign.

Speaking directly after the hearing BDA Chair Mick Armstrong said: "I want to thank Dr Wollaston and her colleagues for finally shining a light on the GDC. Today the Health Committee put the regulator under forensic scrutiny, raising real questions about trust, confidence, competence and leadership at the regulator.

Surprisingly, the BDA was able to agree with Mr Moyes on one thing – he finished the session by stating his desire for more regular accountability hearings. The BDA is happy to endorse this and is certain that the GDC would benefit from more regular scrutiny.

Mick Armstrong added: "It is essential now for both patients and practitioners that the GDC is held to account on a regular basis. A one-off will not bring a troubled regulator back from the brink"

DFT INTERVIEW WORKSHOPS

If you are currently a fourth-year student and beginning to wonder how to prepare for your Dental Foundation Training (DFT) interviews in the autumn, we can help.

In autumn 2015, we will be running a one-day DFT interview-skills workshop in London, with a potential for a second workshop in Manchester if we have enough interest. The event will have a practical focus and will cover interview technique, give you the chance to practise interview questions and sit a mock Situational Judgement Test (SJT) exam.

Further information will be released closer to the time. Last year the workshop was very popular, so if you want to pre-register your interest, please email students@bda.org with your name and preferred venue – London or Manchester.

DEVELOPING FUTURE LEADERS

On Saturday 27 June, we will once again be offering leadership training for your Dentsoc presidents and vice-presidents. The Student Presidents meeting gives these new leaders a basic grounding in leadership skills to help them run your Dentsoc effectively. It is also a chance for your presidents to meet up with dental schools from across the UK and get tips on how others run their dental societies.

Dr Janine Brooks MBE, from Dentalia Coaching and Training Consultancy, will be speaking on leadership versus management. To make sure that everyone can attend, overnight accommodation, travel and expenses are provided, so if you are thinking of running for the position of Dentsoc president or vice-president in your upcoming elections, make sure you save the date!

EXPERIENCE

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In the first of a regular series on dental student experiences, Rosie Pritchett describes her elective in Sweden

In January 2014 I flew to Sweden to spend three months at the Karolinska Institute, Stockholm, for my elective project. It was period when I discovered many differences in dental techniques between the UK and Sweden. For example, amalgam has been banned in Sweden since 2009. This has stretched the various requirements of composite, which is used for both subgingival and large posterior restorations. However, crowns and implants are more readily available.

In Sweden, undergraduate students are able to place their patients on an implant waiting-list and shadow their patients through their implant-treatment plan while carrying out any adjunctive treatment needed. Implants are also more readily available outside the dental school as they are included in the 'Folktandvården', the country's public dental service. This has quite an effect on treatment planning at an undergraduate level because implants are often the preferred option over a resin-retained bridge or a partial denture.

Extractions are fairly uncommon, with most of the students I spoke to naming oral surgery as their weakest area. Any patients needing an extraction need to be booked into a separate oral surgery clinic, allowing all students to gain enough experience before graduating. If the patient ends up needing a surgical extraction, they will usually have to be rebooked onto a different clinic, where the procedure will be carried out by qualified clinicians.

Another difference is the use of a CAD/CAM (computer-aided design/computer-aided manufacturing) system alongside conventional indirect restorative methods. A recent paper in the BDJ1 discusses the use of digital techniques within UK dental schools, where just under half of respondents experienced some aspects of CAD/CAM during their BDS. The Karolinska Institute currently uses the Sirona CEREC MC XL system and teaches students how to scan, design and fabricate restorations in the laboratory before use on clinic. Not all fourth-year students had treated a patient using this technique, however they appreciated the course and saw it as valuable for their future career in practice.

Like the NHS, the Folktandvården also provides free treatment to children up to the age of 19 and there is a strong focus on preventive measures such as regular oral-hygiene instruction and fluoride application. Parents are also well informed and as a result most children attending the dental school had a low caries rate. Swedish students were surprised to hear of the large number of extractions carried out for children under general anaesthetic in the UK and did not experience this as part of their curriculum.

> 'The Karolinska Institute currently uses the Sirona CEREC MC XL system and teaches students how to scan, design and fabricate restorations in the laboratory before use on clinic.'

Overall, I enjoyed my time at the Karolinska Institute and would thoroughly recommend others to try and spend some time practising dentistry abroad. Although the Swedish populace do seem to have a very good level of oral health it is worth remembering that the health service there is providing for a population of around 9.5 million: compare this with London, which has a population of over 8 million alone! **Rosie Pritchett, fifth-year student, Barts and the London** ■

BEHIND THE SCENES AT THE BDA

Laura Assassa, BDA Student Marketing Executive, takes a quick look behind the scenes at the BDA's set-up.

Leading the way

At the top of the tree sits our Board of Directors who are known as the Principal Executive Committee (PEC). All 15 members of the PEC are dentists that have been directly elected by BDA members. The PEC is responsible for managing our policy and strategic direction and is led by the Chair, Mick Armstrong. Reporting to Mick and the PEC is our CEO, Peter Ward who leads a team of around 130 staff based in offices in London, Cardiff, Stirling and Belfast. Peter and the whole staff team are the 'civil service' who advise and support the PEC.

Supporters

The BDA also has a representative structure that enables members and their representatives to feed in their views, concerns and policy priorities to the PEC. To represent the views of each of the UK countries, we have elected country councils, and to represent the interests of different parts of the profession, we have a range of committees. This includes the General Dental Practice Committee (GDPC), the Central Committee for Dental Academic Staff (CCDAS), the Young Dentists Committee and the Student Committee. The Student Committee has two BDA reps in each dental school. BDA reps are voted in at your annual Dentsoc committee elections.

On the ground

We also have a local support network so you can network with other local dentists. Our nationwide network of Branch and Sections and Young Dentists groups meet regularly to run social and clinical events. Students are welcome. Find out about your next local meeting atwww.bda.org/local

Our members (that's you!)

As a member of the BDA you also have an important role to play. Our organisation, and the work we do for the profession, is guided by our members. So it's important that you feedback your opinions to your school BDA rep, or direct to us at students@bda.org. **We are here to support and help you, so your opinion counts. Laura Assassa, BDA student marketing** ■

DENTISTS' EXPERIENCES OF LOOKING FOR THEIR FIRST DENTAL POST

In June/July 2014, the British Dental Association (BDA) conducted a survey of Foundation Dentists (FDs) and Vocational Dental Practitioners (VDPs) who were about to complete their dental foundation training (DFT). The survey sought to assess levels of recruitment among FDs/VDPs and understand their experiences of finding and looking for their first post after completing DFT. Of the 380 BDA members who were surveyed, 162 valid responses were received (a response rate of 42.6 percent).

Most participants were successful in obtaining their first post without much difficulty. Around nine out of ten dentists completing their vocational or foundation training in summer 2014 had found a post by the time of the survey. On average, they took around six weeks to find a post and made three applications for every interview they attended.

The research found that FDs and VDPs were more likely to choose a post in the practice where they had trained compared with the previous year – 28 percent in 2014, compared with only 15 percent in 2013. Just over half had found a post in general dental practice, compared with about four in ten who had found a post in a hospital setting.

FDs/VDPs who had found a post were asked about their reasons for choosing their post. By far the most common reason was career-progression opportunities (over two-thirds cited this reason). The mix of patients and the locality of the new post were also given as common reasons.

Those opting for a hospital post were more likely to be motivated by opportunities for career development and progression, compared with those who opted for a general practice post. By contrast, the latter were more likely to identify pay, flexible-working arrangements, patient mix and location as reasons for choosing their post.

> 'Around two-thirds alluded to a shortage of available posts and six out of ten believed that there were too few posts available for those with limited experience or in their locality of choice.'

A minority (28 percent) of those who had found a post by the time of the survey said they had found it difficult to find a suitable role. They identified high levels of competition as the main difficulty they faced. In addition, around two-thirds alluded to a shortage of available posts and six out of ten believed that there were too few posts available for those with limited experience or in their locality of choice.

The BDA will continue to monitor the factors that influence employment prospects for new practitioners. In addition, further research is needed to better understand FDs/VDPs' employment experience and early career choices.

Findings from the 2014 survey of Foundation Dentists and Vocational Dental Practitioners are available on the BDA website at:

https://www.bda.org/dentists/policy-campaigns/research/workforce-finance/students-young/vdp-survey

For further information, about the research contact the BDA Research Team at Research@bda.org **Martin Kemp, research manager, BDA** ■

BDSA Conference, London

BDSA London 2015 was proudly hosted by King's College and Barts and The London. As the country's capital we didn't fall short with 600 students attending the full conference and a further 100 students at the trade fair and ball.

The conference itinerary comprised of two full days of lectures, showcasing our finest lecturers aiming to cover topics not normally within the BDS curriculum. After the lectures, the first day concluded with our neon-themed t-shirt night. We hope you got messy on the club crawl from Cargo to Aquarium to XOYO because that was our intention! Fancy Dress Friday followed suit at Tiger Tiger honouring London Broadway with both the theme and location. Hats off to everyone who dressed to impress that night, London's commuters won't forget that dental students work hard, but play even harder!

On Saturday there was the trade fair at the prestigious Octagon with over 25 of our kind sponsors on their stands and handing out freebies. If you didn't go home with at least two bags worth, you're not stealth enough and need to up your game! Finally, ladies and gentleman we welcomed you to big and beautiful, the ball! Your very own ringmaster walked you through a night of glitz, great food and pure entertainment at the magical Brewery. Our live band and DJ played throughout the night, so if you weren't too busy embracing your inner performer at the circus, you were on your feet, twerking, naturally.

We wanted to take this opportunity to say the biggest thank you to our Organising Committee, without them the conference would not have been possible. We also wanted to wish the new BDSA Executive Committee the best of luck, you're going to do a stellar job! **Kaly Gengeswaran, King's dental school and Jaspreet Bahra, Barts and The London**

REVIEWS: BOOK

ESSENTIALS OF ESTHETIC DENTISTRY, PRINCIPLES AND PRACTICE OF ESTHETIC DENTISTRY, VOLUME 1, NAIRN HF WILSON, HARDBACK, ELSEVIER LTD, 2015

Do you ever see before-and-after clinical cases and think how do they do that? Well, ponder no more as Essentials of Esthetic Dentistry: Principles and Practice of Esthetic Dentistry does exactly what is says on the tin. It is a simple, clinically relevant and with up-to-date text providing invaluable tips on many advanced restorative procedures.

Comprising ten chapters, this book addresses the key issues surrounding good patient care, such as patient examination summarised in checklist form, thorough assessment and treatment planning, not to mention two full chapters dedicated to clinical techniques.

My favourite part was the 'Concluding remarks' section at the end of every chapter. These are paragraphs giving golden nuggets of information on the chapter subject in a conversational style making the text less theoretical and more engaging.

The book is also easy to read, and picture-heavy for all the visual learners out there with plenty of information on direct and indirect composite restorations, how to manage recession, treatment options for tooth wear, minimal intervention and the dreaded occlusion! However, it would benefit from more information on bridges and implants.

Zenab Mushtaq, fourth-year dental student, Liverpool

STUDENT

➤ Sarah Khalil, 24,
third-year student

"I have been at the school for almost three years now on the Graduate Entry Dental Programme. When I graduate I plan to take my DF1 and DF2 training and work in the NHS with a view to specialising in the future.

I'm from Alexandria in Egypt originally but I've spent most of my life in the UK and have lived in Plymouth since the age of nine. I still live in Derriford with my family, which is a convenient place to live, not too far from the main university campus and close to the Derriford Dental Education facility and main hospital. I like to keep active and pursue outdoor activities so being close to the moors and having a gym on my doorstep is quite handy.

'I came here because of the evidence-based teaching, the spiral-learning ethos, early clinical exposure and the primary care and community engagement setting.'

I came here because of the evidence-based teaching, the spiral-learning ethos, early clinical exposure and the primary care and community engagement setting. I completed my previous degree in London, so it's quite a change. Plymouth is obviously less busy and the southwest is surrounded by breathtaking scenery. But I have found there to be excellent clinical supervision, high quality clinical facilities, impressive use of dental simulation (phantom heads) and engaged student learning. The smaller class sizes and location make for an enhanced quality of life.

The staff-student relationship is very good. Staff are very approachable and supportive and take student feedback very seriously. The DentSoc is run primarily for dental students by dental students and includes trade fairs, company talks, debates, charity and sporting events and end-of-year-balls. I was the DentSoc president last academic year and I am still an active member. Last year we introduced a magazine, On The Cusp, which the staff have been actively involved in.

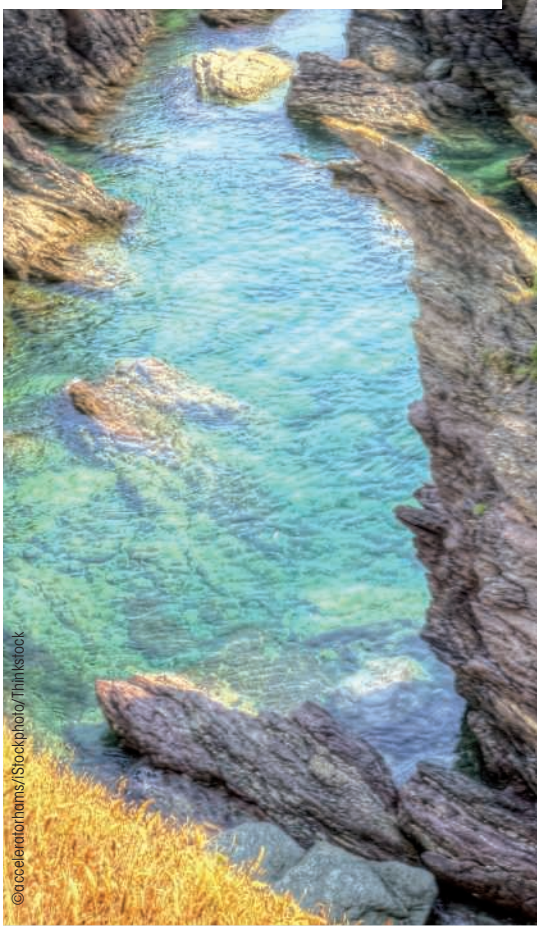
There is actually very little I would improve about the programme. Perhaps the spread of final-year cases over two years would take the pressure off having to complete cases in a short timeframe. It would also be desirable to have drop-in simulated dental learning environment sessions in the latter years for students that have not undertaken a certain clinical procedure in some time and want to familiarise themselves with it before performing on a patient.

There are some downsides to living here too, such as the limited parking facilities and also transport in general. When the weather has been bad in the winter, the train lines are often affected, making it difficult to leave the city. But, all in all, I'd say Plymouth is a great place to study, live and work." **Sarah Khalil** ■

STUDENT VS STAFF

PENINSULA

Hazel Davis discovers what it's like to study and work at Plymouth University, Peninsula School of Dentistry



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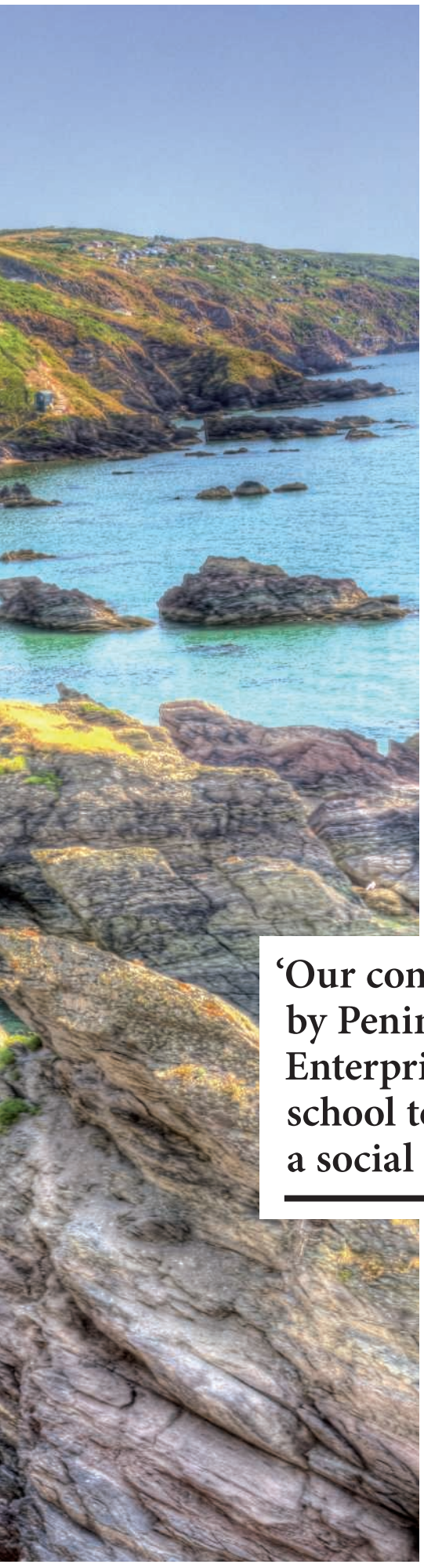

➤ Ewen McColl, *Associate Professor, Senior Lecturer and Honorary Consultant in Restorative Dentistry*

STAFF

"I am from Glasgow originally and carried out my undergraduate training at Edinburgh University. I have also studied at Copenhagen University, The Eastman Dental Institute, Guy's Dental Hospital, and Loma Linda University in California. Before joining Peninsula I served in the military and was the clinical lead at The Dental Hygiene School.

I've been with the school since September 2012 and I teach all aspects of restorative dentistry. I live in the South Hams area of Devon, which is famous for its beautiful beaches and coastline.

At Peninsula we teach our students in a primary-care setting. We have four purpose-built Dental Education Facilities (DEFs) across Devon and Cornwall, where our students treat NHS patients (nearly 15,000 so far) under the supervision of qualified dental health professionals, as part of their training. This hands-on approach is supplemented by active engagement in the community, including

Oral-health awareness and access to dental-care projects with specific groups, such as primary school children, young mums, the elderly, adults with learning disabilities, the homeless, substance abusers and others. The DEFs and our community activity is managed by Peninsula Dental Social Enterprise and we are the first dental school to put this sort of activity into a social enterprise framework. The whole arrangement means that we create new dentists who are not only clinically excellent, but also have empathy and understanding for those in their care.

'Our community activity is managed by Peninsula Dental Social Enterprise and we are the first dental school to put this sort of activity into a social enterprise framework.'

We have more than 300 undergraduate and post-graduate students and we have a fantastic relationship with our student body. Academics have almost daily contact with students in the clinical environment and we have a true culture of being open with each other. If students have any concerns, either clinically or pastorally, we have an open-door policy, which allows students to raise these issues.

There's a family feel to the dental school and we all contribute to our magazine and have regular social events that staff attend. There is always some form of staff involvement in DentSoc activities. It's a sign of the mutual respect we have for each others as colleagues, all be it at different stages in our dental careers. Each clinical facility has a clinical lead. The students also have a named academic as their tutor whom they meet with regularly. In addition, they get a huge amount of pastoral support from the year leads and the university.

Last summer's graduation ball has definitely been the social highlight for me. I had worked very closely on clinic with this cohort of students, so it was fantastic seeing the whole school, staff and students alike, celebrating this fantastic achievement.

Owing to the fact that our facilities are based at the heart of the community and owing to the fantastic work of our Community Engagement team I really feel the Dental School has a big impact on Plymouth as a whole. I think this would be difficult in a larger city.

Though I think we have a fantastic course giving students a wide breadth of clinical experience, we are always looking at ways to improve and feedback from patients and students alike really helps to develop our teaching. Because we expose our students to patients early on in their studies, they are able to make a difference in addressing oral-health inequalities as well as gaining vital hands-on experience. We're constantly pioneering and at the forefront of new and improved ways to do things – and that's a really exciting thing to be part of.

"It is a privilege to be part of the success story that is Plymouth University Peninsula School of Dentistry." **Ewen McColl** ■

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ETHICAL DILEMMA

Susan N'Jie, dento-legal adviser for the Dental Defence Union(DDU) explains how to ensure patients are clear on charges for dental work

I recently saw a report that highlighted fees as being a common cause of complaints against dental professionals. What can I do to make sure that my patients are clear about what they will be charged?

In the DDU's experience, dental fees are a factor in many complaints. Unfortunately, this can result in a practice losing a valued patient and, in some cases, facing a General Dental Council (GDC) investigation. It is therefore very important that dental professionals do all they can to make sure their patients are clear about dental fees.

In January 2015, the consumer pressure group Which? accused some dentists of failing to explain dental charges properly and not being clear about the difference between NHS and private-treatment options . Researchers found half of those examined had not prominently displayed a fees list.

'Consent must be obtained for any revisions that are made to the treatment plan and an amended plan should be issued in writing.'

There are many steps that practices can take to make sure dental fees are clear to patients. If you work in a practice that provides both NHS and private treatment, you must make it clear to your patients which treatment can be provided under the NHS and which can only be provided on a private basis. You must also not mislead patients into believing treatment that can be provided on the NHS can only be provided privately. If you only provide private treatment, you should make sure that patients are aware of this before they attend for treatment.

Practices should clearly set out their services and what they charge in practice notices and on the their website. Details of payment arrangements and if patients are expected to pay in advance or on completion of the treatment should also be displayed. If you offer treatment on the NHS, it's a good idea to download the NHS dental charges leaflet and poster and display these in your practice.

Dentists should provide a written treatment plan that includes details of whether or not the patient has chosen to have some parts of their treatment provided privately, complete with details of the costs of the treatment. A copy of this should be retained for the patient's dental record. If once you have begun a patient's treatment you believe that further treatment will be needed, the patient should be warned in advance and advised of possible additional costs. Consent must be obtained for any revisions that are made to the treatment plan and an amended plan should be issued in writing.

Not all patients have to pay for NHS dental treatment. Dental professionals should ensure they understand the rules regarding patients' entitlement to free treatment or help with NHS charges and ask patients for proof of their exemption status. If a procedure is either expensive or extensive, you may wish to consider providing a "cooling off" period so that patients do not feel they have been rushed into making a costly decision.

Susan N'Jie ■

Key points to remember

- Set out services and charges in practice notices and on the website. State if you currently accept NHS patients and provide details of payment arrangements, such as whether patients are expected to pay for their treatment in advance or on completion.
- If you offer treatment on the NHS, it's a good idea to download the NHS dental charges leaflet and poster and display these in your practice.
- Provide a written treatment plan that includes costs and if the patient has chosen to have some elements of treatment on a private basis and the charge. Retain a copy with the patient's records.
- Warn the patient in advance if you believe further treatment may be needed and advise them of possible additional costs.
- Obtain the patient's consent if you need to revise your treatment plan. Issue an amended plan in writing and include a revised cost estimate.
- Ensure you understand the rules regarding patients' entitlement to free treatment or help with NHS charges and ask patients for proof of their exemption status.
- Ensure you don't put pressure on patients to accept private treatment. For example, it is not acceptable to tell NHS patients that they can only have a particular treatment privately when that treatment is available on the NHS.
- Consider providing a "cooling off" period before expensive or extensive procedures begin so patients don't later feel they were rushed into a costly decision.

For more information, visit www.the-ddu.com

SO YOU WANT TO BE AN ORAL AND MAXILLOFACIAL SURGEON?

Getting to the top in one of the most competitive fields in medicine and dentistry is no easy feat. **Soudeh Chegini** is medically qualified and currently studying dentistry at King's College, London, and **Paul Kiwanuka** is dentally qualified and studying medicine at Bart's and The London. Here, they look at the career pathway ahead to become an Oral and Maxillofacial Surgeon.

Oral and Maxillofacial Surgery (OMFS) is the surgical discipline of dentistry. It encompasses a broad range of operations from fixing facial bone fractures and aesthetic surgery to operations for oral cancer. In the UK all OMFS surgeons are dually qualified in dentistry and medicine. This has lead to the misconception that is it is a lengthy training pathway. In fact, it has been repeatedly measured as being the same length as any other surgical training pathway. OMFS trainees reach consultant posts at the same average age of other surgical specialties.

To become an OMFS surgeon, trainees enrol in a registrar programme, which takes five years to complete. It is a salaried training post and culminates in a final Fellowship examination for the Royal College of Surgeons in OMFS (FRCS OMFS). To be eligible to apply for this training programme you must first successfully complete a number of examinations. It can be a confusing process, but in this article we aim to simplify the steps.

Box 1 lists all the essential requirements to be eligible for an OMFS registrar post. The requirements are set within the person specification of the OMFS registrar post and this changes slightly from year to year, so check it annually.

Once you complete OMFS registrar training, you can enter the specialist register that is regulated by the General Medical Council (GMC). The GMC has also published requirements which must be met at the end of training.

The biggest hurdle to becoming a OMFS surgeon is obtaining your dual qualification in medicine and dentistry. Recent recruitment figures show a 50:50 split between OMFS registrars who undertook a degree in medicine or dentistry first.

When interviewing a candidate to complete a second degree in medicine or dentistry, the most important thing the panel are looking for is a candidate's enthusiastic about OMFS, who is realistic about what the training involves and can show commitment to the specialty.

Box 1

OMFS training requirements

- 1. Dental degree or medical degree
- 2. Medical Foundation Training
- 3. OMFS House Officer Post
- 4. Medical Core Surgical Training
- 5. Membership examination of the Royal College of Surgeons (MRCS)

Where do I start?

Once you've caught the OMFS bug you need to make certain this is the specialty for you. The best advice is to decide early. If you're considering OMFS as a career, try to maximise your exposure. This will help you confirm your career choice, introduce you to people in the specialty who can offer advice, and provide valuable CV points.

During dental and medical school you can join the University's OMFS society, undertake OMFS-related special study modules and, if possible, an elective that is linked to the specialty. You can learn more about the specialty and meet others interested in OMFS.

No matter what your stage of training, the best first step is to make contact with your local OMFS department. Introduce yourself to the department's consultants, with an email to the consultants who are associated with the university. They will be more than happy to help facilitate observing on ward rounds, clinics and in theatre. There's usually plenty of opportunity to get involved in an audit project or even research for presentation at a conference or to publish in a peer-reviewed journal.

Gaining OMFS Experience

The best way to get a taste of the specialty is to work in it. After qualifying from dental school there are opportunities to work as a junior doctor in Dental Foundation Year 2 posts. You can check COPDEND (UK Committee of Postgraduate Dental Deans and Directors) and individual Deanery websites for details on these posts. Applications are open during Dental Foundation Training Year 1 and there are posts across the country. If you have already been graduated for more than two years you can consider standalone SHO or DCT (Dental Core Training) posts. These are advertised through a wide variety of media including the *BDJ*.

'The best advice is to decide early. If you're considering OMFS as a career try and maximise your exposure. This will help you confirm your career choice, introduce you to people in the specialty who can offer advice and provide valuable CV points.'

Box 2

Graduate dentistry degree programmes are available at:

- Aberdeen
- UCLan
- KCL
- Liverpool

During your post there are plenty of ways you can record your continued development and interest in OMFS. This includes maintaining a logbook of all surgical procedures you observe, assist and perform. You should also look to complete an audit loop. You may be able to present the outcomes locally or at a national conference.

Most training posts provide a study fund. You can request these funds to help pay for you to attend relevant courses. There will also be courses hosted locally and the Maxfax links website, http://maxfaxlink.org, has a list of national courses. Some relevant courses may include day plating and soft-tissue suturing.

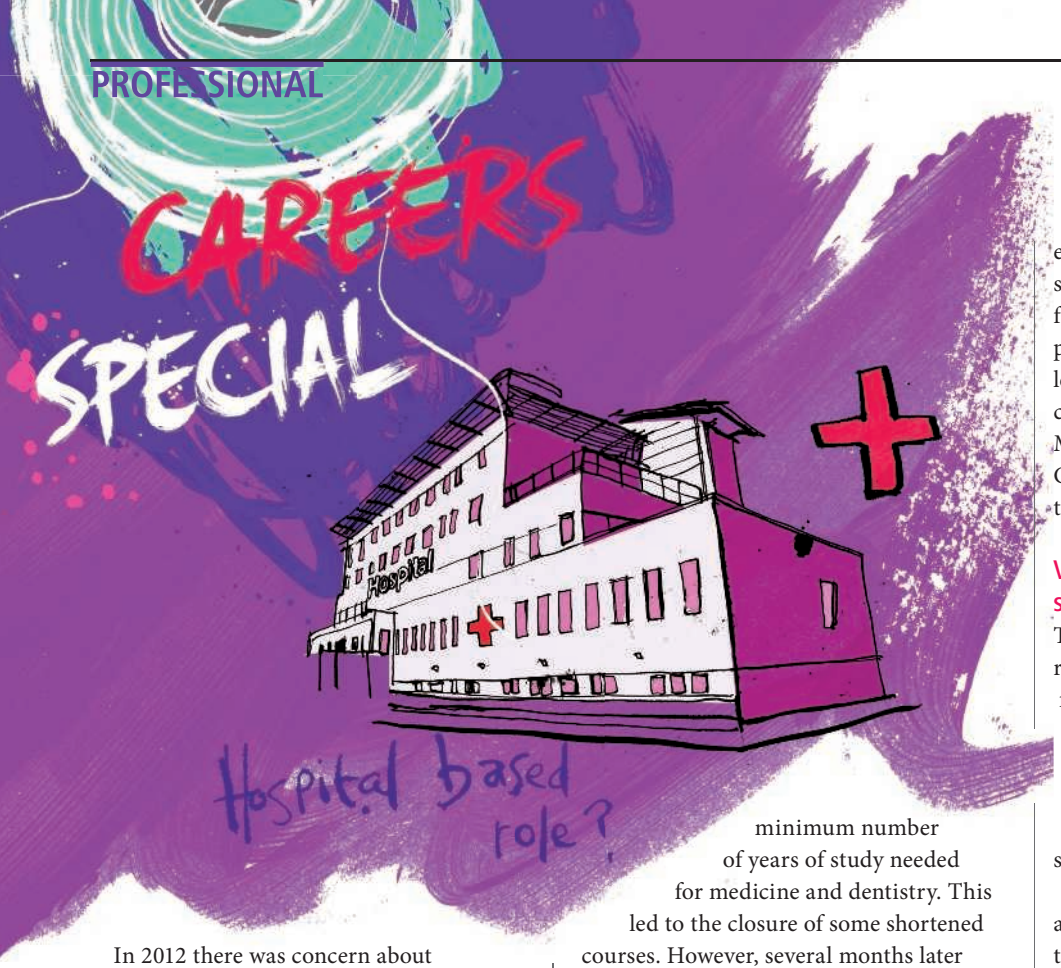
Joining the British Association of Oral and Maxillo-facial Surgery

Outside of working in an OMFS department, consider joining the British Association of Oral and Maxillo-facial Surgery (BAOMS) and its Junior Trainee Group (JTG). They host annual affordable conferences for pre-registrar students, doctors and dentists interested in the specialty. Consultants from around the country come to speak at the conference, so this is always an excellent opportunity to gain OMFS-teaching and career-progression advice. The JTG has an organising committee, which is made up of elected members. As an active member you can get involved in organising events and shaping opportunities for trainees.

Through the BAOMS you will receive the official scientific journal of the society. This is one of the most respected OMFS scientific journals in the world and a valuable way to stay up to date on developments.

Gaining the second degree

Applying to university to study for your second degree is standardised through UCAS. Some courses will require a BMAT or UKCAT entrance aptitude examination: details will be on the UCAS website. There are also shortened graduate programmes for both dentistry and medicine. Boxes 2 and 3 have a list of these courses.



In 2012 there was concern about the recognition of shortened medical and dental programmes within Europe. This was based on the interpretation of the *2005 EU Directive on the Mutual Recognition of Professional Qualifications*. This detailed a minimum number of years of study needed for medicine and dentistry. This led to the closure of some shortened courses. However, several months later a clarification of the law was given. This stipulated that students could be given exemption from years of study owing to study in previous courses. This has now firmed up the position of all shortened programs at institutions that also run full length programmes. All running shortened courses are now recognised by the General Medical Council and General Dental Council and Department of Health and lead to full professional registration.

What should I do after my second degree?

This is the time to look up all the other requirements to meet the eligibility criteria for OMFS training. This will include two years of medical foundation training with applications opening during the final year of medical school. There are a variety of options to work in different medical and surgical specialties across the country.

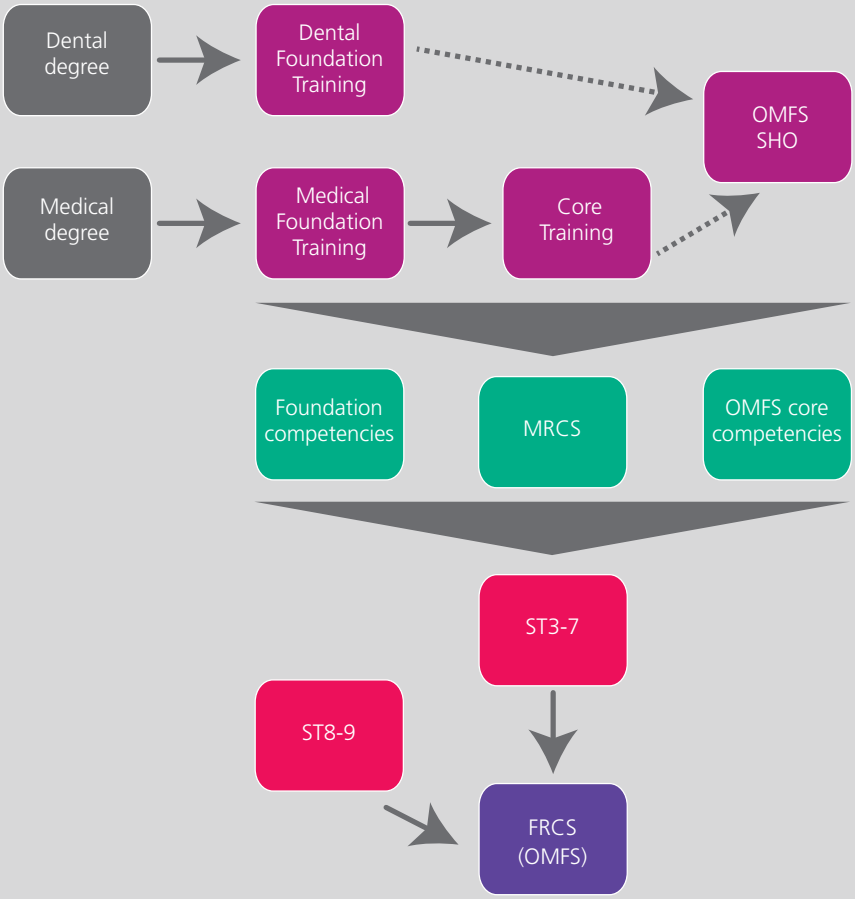
Core surgical training is the next step and during this time all trainees will need to sit the Membership Examination of the Surgical Royal Colleges of Great Britain (MRCS). Core surgical training is a two-year

Box 3

Graduate medicine degree programmes are available at:

- Birmingham
- Bristol
- Cambridge
- Cardiff
- KCL
- Leicester
- Liverpool
- Newcastle
- Nottingham
- Oxford
- Queen Mary London
- Southampton
- St George's
- Swansea
- Warwick

Career pathway



programme rotating through a choice of surgical disciplines. Application is through national recruitment and available across the country. These years are a requirement for all trainees aspiring to enter surgical training in all specialties.

Depending on your previous experience, you may attain core surgical training competencies after one year instead of two. Once you have your core surgical training competencies signed off, you will be eligible to apply for OMFS specialist registrar training.

Run-through training

Since 2014 there is a new option of run-through training. Candidates apply for OMFS training, which includes the two-year core surgical post. Candidates apply at the end of the medical foundation programme instead of applying to core surgical training. The advantage of this programme is the seamless transition from core surgery to OMFS registrar training without the need for reapplication.

Summary

The aim of this article is to provide a road map to training in oral and maxillofacial surgery. However, hurdles and opportunities are constantly changing, so always keep up to date by asking colleagues and checking information on the BAOM's website. Hopefully the topics covered in this article will give aspiring OMFS surgeons an idea of what to expect and where to begin.

Resources

- www.baoms.org.uk
- www.jtgonline.org.uk
- General Medical Council *Position Statement on Oral and Maxillofacial Surgery* – December 2011
- http://www.gmc-uk.org/OMFS___Position_statement_Dec_11.pdf_46365958.pdf

Soudeh Chegini & Paul Kiwanuka

REFLECTIONS, NEW ZEALAND AND TURTLES

In his second column about life as a Maxillofacial and Oral Surgery Trainee, **Nasar Mahmood**, a DCT1 at Mid Yorkshire hospital looks back on his first night on call.

They say everything in life that involves risk to you or others requires a licence! Interestingly, I am not married yet, don't own a motorbike and drive like a turtle on beta- blockers, which brings me to my dental licence. Now, if you stop any dental trainee and ask them to list the top three things they are afraid of, "getting sued" is most likely at the top. It's an understandable fear yet the consequences for young dentists are not something that is often explored. I personally didn't think about it very much until a patient of mine said something about himself that made me reflect on my own behaviour.

The patient, let's call him John, said his biggest regret was not going to New Zealand when he was 22 years old and instead deciding to get married. For years afterwards he thought of going but was "too afraid" of what his wife might say if he suggested it again because she hated the idea of travelling. Now, many years later, he is too ill to fly and is bed bound. He said he couldn't risk going because of the potential breakdown of his relationship but he then looked straight at me and said: "Listen kid, some risks make you stop in your tracks and make you too afraid to go out of your comfort zone or do something you really want to do." It got me thinking for a few days. John had described every doctor, nurse, dentist and trainee I knew. John had also described me to a certain extent. Reflecting on John's statement and my time at the hospital so far, that most of the time (without actively knowing it) I tried to stick to the procedures and treatments with least risk. I was too afraid of making a mistake when doing something I was unfamiliar with.

Despite joining this post for more experience and greater knowledge of maxillofacial and oral surgery, I, Nasar Mahmood, had joined hundreds of other trainees constantly allowing the fear of "getting sued" hinder my learning process. Like John, I had decided to take the path of least risk not realising the consequences for the future. For John, it was not going to a place he had always dreamed of: for me, it was potentially not making the most of my training post. That's the biggest personal reflection I wanted to share with future trainees in this second column - be in control of your fears, don't let your fears control you.

> **'I, Nasar Mahmood, had joined hundreds of other trainees constantly allowing the fear of "getting sued" hinder my learning process.'**

In addition here are five more reflections from my past few months at the hospital:

- 1. Talk to patients like people. Cut the jargon, explain simply and give them time to ask anything they are concerned about. They will appreciate it more than you will ever know.
- 2. Situations can get tense very quickly (especially when A&E gets swamped). Learn how to quickly defuse them.
- 3. The best way to have a good start to the day is to arrive early and have a few moments of complete silence and peace.
- 4. Chocolate is like currency in the hospital (seriously).
- 5. Never ever "leave a man behind". Always help a struggling colleague. A strong team is an efficient team.

Nasar Mahmood

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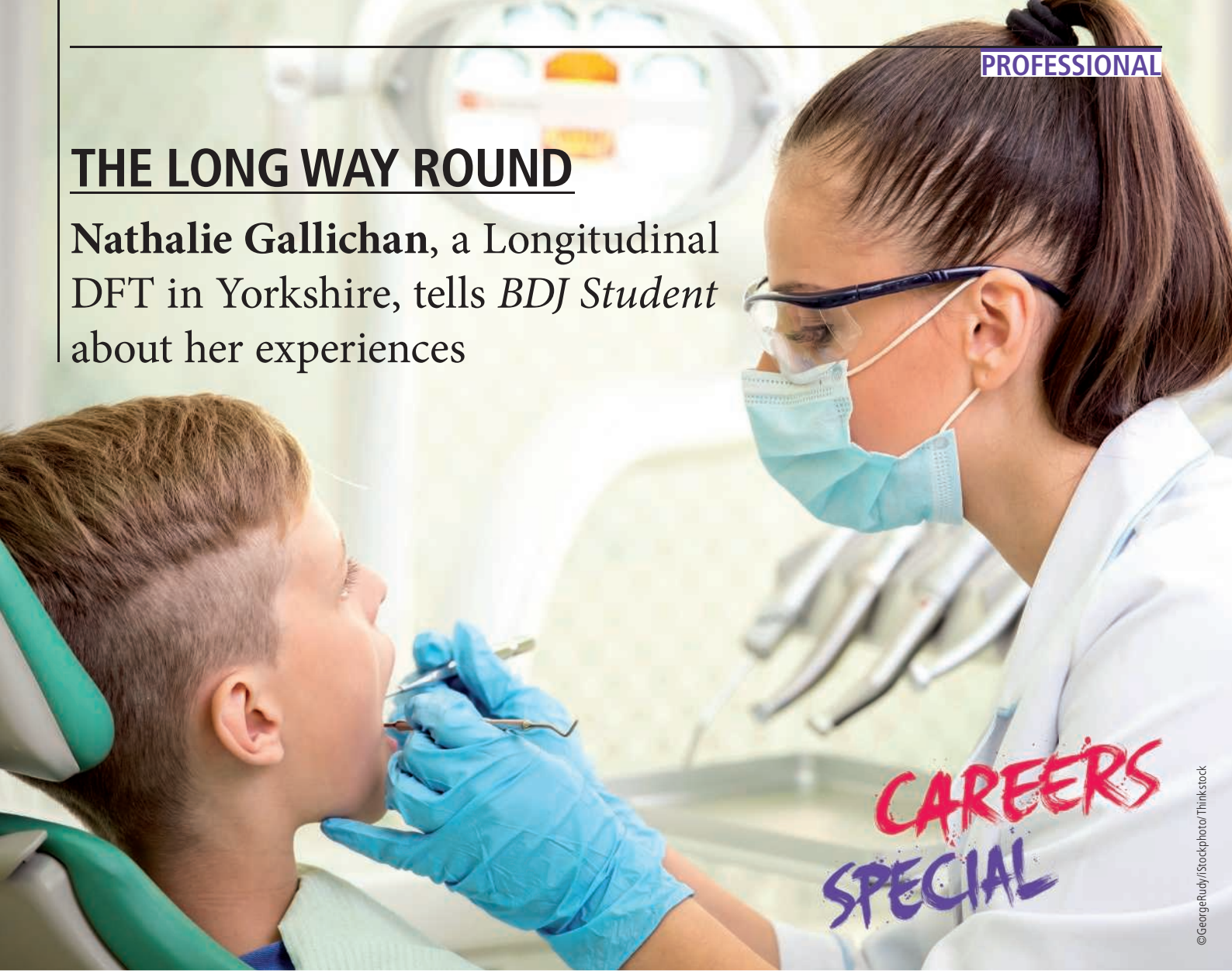
THE LONG WAY ROUND

Nathalie Gallichan, a Longitudinal DFT in Yorkshire, tells *BDJ Student* about her experiences



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Eighteen months into Longitudinal Dental Foundation Training (LDFT) and most of my colleagues are now applying for jobs after completing DCT1 (Dental Core Training). After you have completed one year of DFT (Dental Foundation Training), your options are either to stay in practice or apply for DCT posts. DCT posts can involve a number of specialties. The most popular is oral and maxillofacial surgery, which improves oral-surgery skills and medical knowledge. Other posts include working in the community service, restorative or mixed specialties. If you choose to undertake further training or want to specialise in the future, the current career path would take you down the route of applying for DCT posts. Many of my colleagues who did DFT and then DCT1 dealt with the stress of DCT applications last year. However, as an LDFT my two years did not require any sort of inter-year interview, which was great! Longitudinal Training has been a fantastic chance to gain a broad range of experience; enhancing my skill base in both primary and secondary care.

When I was in the process of applying for DFT posts, General Professional Training (GPT) schemes, which previously offered two years of training post qualification, had been given minimal publicity and few details were available about possible positions. I was under the impression that Longitudinal posts were highly competitive and only four schemes offered the two-year Dental Foundation Training programmes: Yorkshire, Newcastle, Cardiff and Northern Ireland. I spoke to friends who were currently undertaking or had completed longitudinal training to gain as much information as possible so I could make an informed choice. This process was invaluable in my decision making and only reinforced my decision that LFDT should be by first choice.

‘I have an interest in paediatric dentistry and the privilege of a tailored timetable allows me to build a firm foundation while gaining insight into paediatric dentistry.’

My experience

I absolutely love my job! I have the chance to tailor the post to best suit my interests. I have an interest in paediatric dentistry and the privilege of a tailored timetable allows me to build a firm foundation while gaining insight into a speciality such as paediatric dentistry. This will definitely enable me to make informed career choices after LDFT.

In Yorkshire, the scheme runs on the basis of alternating one week in primary care dentistry

with one week in secondary care. There are six posts with each job shared by a pair of dentists who undertake alternate weekly placements. Placements are allocated based on ranking with the locations stretching from Hull and Scarborough in East Yorkshire to York and Bradford in West Yorkshire. Each post has a different main focus, for example maxillofacial surgery, community dentistry or a post with paediatric or orthodontic components. I was fortunate enough to secure my first-choice job within the scheme, based between the Pinderfields Hospital Wakefield and a practice in Mirfield. Both are commutable from Leeds, where I wanted to be based. My hospital week comprises one-and-a-half days spent on the orthodontic clinic, treating my own list of orthodontic patients; two-and-a-half days undertaking oral surgery and oral medicine clinics, including treating patients on LA/GA lists and finally one day undertaking paediatric dentistry in a community setting.

Positives

There are many positive aspects to a LDFT post including:

- Breadth of experience. I've had a taste of various specialities, which has enhanced my skills and knowledge to apply in primary or secondary care settings. Some authorities predict that in the future dentistry will follow a similar route to medicine, using general dental practitioners as a gateway to seeing a specialist, with more specialists or dentists with enhanced skills needed in the workforce. This training scheme may give young dentists a better insight into the specialties they enjoy and may choose to follow.
- Another positive aspect that distinguishes Longitudinal Training from DF1 and DF2 posts is that it minimises the possibility of 'deskilling' as a general practitioner owing to the alternate weeks based in general practice.
- It is not necessary to participate in an out-of-hours rota (most maxillofacial DF2 posts require a level of out-of-hours commitment).
- Exposure to different techniques and experienced colleagues that you wouldn't have the chance to explore in primary care or even through study days.
- The Yorkshire scheme allows flexibility to tailor the post to your needs.
- Training in primary care alongside secondary care prepares you perfectly for the MJDF/MFDS post-graduate qualification exams.

Innovative new scheme to develop specialist skills in a practice environment

Laura Assassa, BDA Student Marketing Executive, outlines an exciting new scheme for graduates that want to develop advanced skills while working in practice.

- After completing Foundation or Vocational Training, to develop specialist skills graduates often progress to Dental Core Training (DCT) posts in hospital settings. Taking the traditional hospital route means trainees gain advanced skills, but it has some disadvantages. Trainees are often concerned that by doing this they will lose general dental skills, for example how to hit Unit of Dental Activity (UDA) targets. In response to this, Health Education Thames Valley and Wessex is currently piloting an innovative DCT programme that aims to enhance trainee's skills in general dental practice while developing skills in specialist areas.
- The pilot DCT1 programme offers trainees the chance to carry out routine dentistry plus complete a structured programme to develop skills in a primary care setting. It is a similar format to the DFT scheme, with tutorials, workplace assessments, case-based discussions and a portfolio. Training will be delivered by an on-site educational supervisor and a clinical supervisor with a special interest. Areas covered include oral surgery, periodontology, prosthodontics and endodontics.
- The educational and clinical supervisors support trainees and deliver weekly teaching sessions in the workplace. For example, a practice may offer prosthodontics and periodontics on alternate weeks, so trainees will spend half of their time on one area, and the other half on the other. Training comprises four clinical days with one study day each week. Attendance at a monthly formal lecture is required and trainees are encouraged to complete either the MJDF or MFDS examination. Trainees may also attend outreach clinics and external study courses. There is a study-leave allowance and protected time for teaching and learning throughout the year. There are no educational costs for trainees and participants receive a bursary to attend additional courses of their choice.
- This pilot scheme offers trainees the chance to retain and enhance existing skills in addition to developing further skills in specialty areas. It is a workplace-based programme, with hands-on training, supplemented with seminars and formal study. The new scheme is an exciting prospect and is an area which has great potential as trainees retain existing skills while developing skills in specialist areas.

➤ For further information about the scheme please contact **George.fahay@thamesvalley.hee.nhs.uk**

Negatives

- It is extremely beneficial to be able to drive. Locations vary and travel by public transport may not be practical. I work in four different sites in my post.
- Adjusting to full-time work can be difficult and exhausting; adjusting to two new jobs and different specialties is even harder and can take time. Furthermore, as alternate weeks are hospital based, the training can seem disjointed and does not provide a fully authentic impression of life as a GDP.
- It takes longer to gain clinical confidence.

Final Advice

What you gain from the scheme is entirely dependent on how much you put into it. You are surrounded by people who are experts in their fields, offering excellent teaching, guidance with audit projects and CV-building advice, so make the most of this! If you show enthusiasm and interest in the subject, the rewards will be greater. It is not a fast track to specialty training but if you are considering specialising it adds valuable skills, knowledge and exposure that you may not have gained otherwise. I have thoroughly enjoyed my experience so far and I have a much better insight into different specialties. If you would like a broad foundation or are unsure whether or not to specialise, I would say that Longitudinal Dental Foundation Training is the scheme for you. **Nathalie Gallichan** ■

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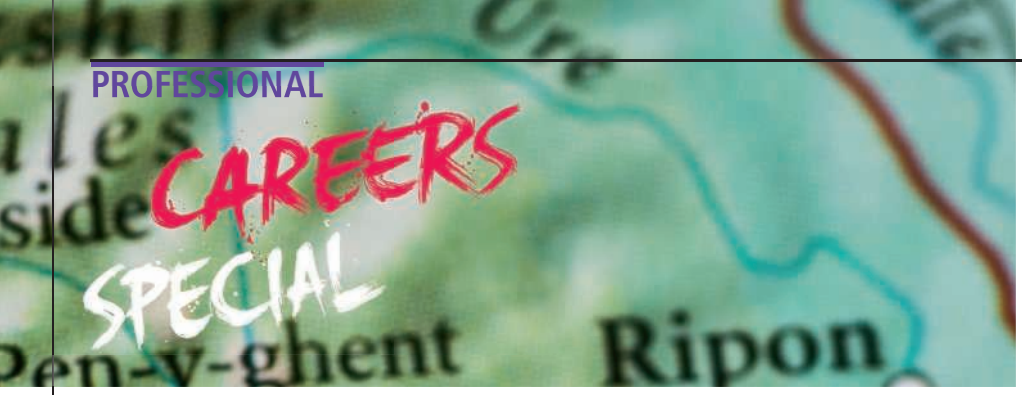
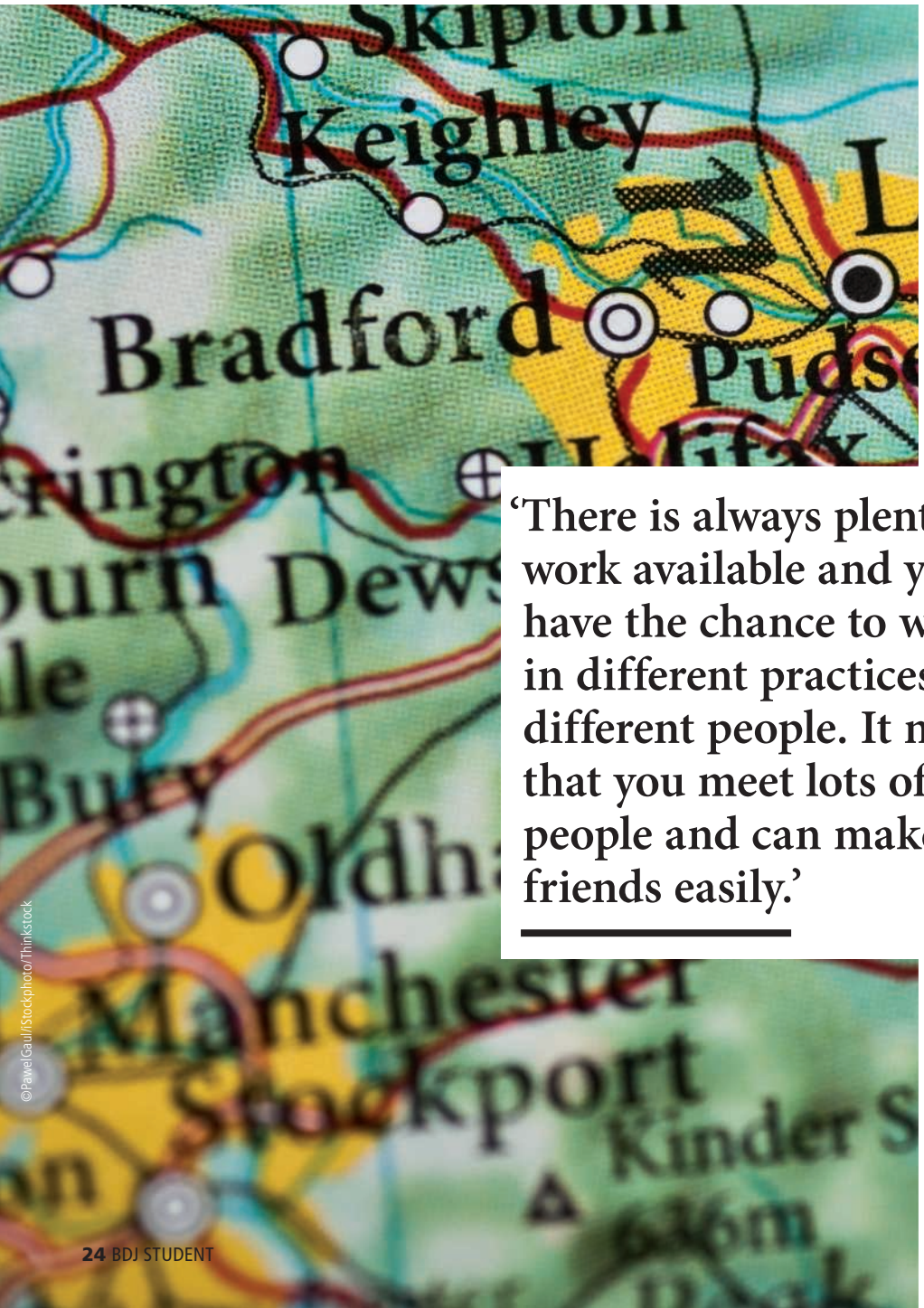


HOW TO WORK IN… REGIONAL DENTISTRY

Nafiza Jamil, a regional dentist for Integrated Dental Holdings (IDH), tells *BDJ Student* about her career so far



BDJ Student: *Where do you work?*
Nafiza Jamil: At the moment Keighley, West Yorkshire, and Barnoldswick in Lancashire, but over the past year I have worked in Bury, Bolton, Westhoughton, Wigan, Skipton and Saltaire.

BS: *Can you explain your job?*
NJ: I work in general dental practice providing long- and short-term cover. So, for example, some practices I go to I am simply covering holidays, which could be for a couple of weeks to a month. Other places it is more long-term cover, like sickness or maternity leave. Some places I am a stand-in until a permanent dentist can be found for the position.

BS: *Can you tell us about your career pathway?*
NJ: I graduated from Manchester Dental School with my BDS in July 2012. We were the first year to secure Dental Core Training (DCT) places through national recruitment, and I was allocated a DCT trainer in Doncaster, South Yorkshire with the South Yorkshire and East Midlands Postgraduate Dental Deanery. I also completed my Membership of the Faculty of Dental Surgery (MFDS) during this year. After completing my DCT year I moved back to the North West and immediately began work as an My Dentist Regional Dentist.

‘There is always plenty of work available and you have the chance to work in different practices with different people. It means that you meet lots of people and can make new friends easily.’

BS: *What are the best aspects of the job?*
NJ: There is always plenty of work available and you have the chance to work in different practices with different people. It means that you meet lots of people and can make new friends easily. You can learn about how practices are run and how different dentists and nurses work. There is lots of support available because there’s always a dentist around to discuss a clinical matter with, or a practice manager or nurse to help with other problems. Often, as a regional dentist, jobs will become available in the practices where you work and spending time as a regional there may help you discover if it is the right place for you to work. If it’s not then there’s always plenty more opportunities available.

BS: *And the worst?*
NJ: You move around a lot so you have to get used to new people, materials and equipment. There is a lot of travelling involved. It can be challenging providing treatment if you know you have a limited amount of time at a practice. Sometimes you have to stabilise patients and get them out of pain rather than do the full ideal-treatment plan. Sometimes you can get very attached to people and make really good friends, so it can be sad when it is time to leave.

BS: *What advice would you give someone who is interested in your area of work?*
NJ: Visit the my dentist website and read the job description - there is lots of information. If you would still like to know more then have a chat with one of the regional dentists.

BS: *What can dental students do to put themselves in a better position for a career as a regional dentist?*
NJ: Becoming a regional dentist is a brilliant career option for a newly qualified dentist, whether you see your future in general practice or not. As a student you are always surrounded by lots of dentists who work in different areas of dentistry, so use this chance to talk to them and get as much advice as you can. My dentist are always present at conferences, they have a website with lots of contact details, so should you have any queries or want to talk to a dentist, they can point you in the right direction.

Dr Nafiza Jamil CV

1988	Born in Bury
2012	Graduated from Manchester
2012 – 2013	DCT year at Bawtry Dental Practice, South Yorkshire
2013 – present	***IDH Regional Dentist*** across Lancashire and Yorkshire

Interested?

How can I become a General Dental Practitioner (GDP)?

- The first aspect you need to think about is how much work you want. Most jobs in general practice are self-employed associate positions with a Unit of Dental Activity (UDA) target. Be brutally honest and realistic with yourself about what you can achieve and take on a manageable target that will allow you to carry out good dentistry without being under too much pressure. You can always increase your UDAs as you become more confident.
- Talk to your colleagues and never be afraid to ask for a second opinion or advice. They are a wonderful resource and should be used as such. Most dentists are pleased to help out recent graduates, as they remember only too well how it feels to be new to a practice. Take advantage of local events, lectures and CPD opportunities. They are great for learning, keeping up to date with product and technical advances, and meeting people. Consider taking further exams like the MFDS because it is always good to have more qualifications and studying for them keeps your theory fresh.

What about regional dentistry?

- Graduates interested in applying for the Regional Dentist Programme can do so online at www.mydentistcareers.co.uk or contact the My Dentist Resourcing Team on 01204 799699. The scheme is open to all graduate dentists nationwide who wish to work in an innovative, supported role and gain experience with the largest dental employer in the UK.
- The scheme allows dentists to work in a variety of practices and learn from different clinicians. They are offered a year-long contract with the chance to move into a self-employed position within the business.
- "New dentists can find the first few months in the workplace particularly tough, especially if they are immediately hit with a very demanding UDA target," says Matt Reeves, Head of Resourcing at My Dentist. "This scheme aims to provide them with the chance of a more flexible role that is tailored to their level of experience. We believe it's a great way to get started and give graduates a wider range of experience than going straight into a single practice. We've received overwhelmingly positive feedback from previous regional dentists since launching the scheme."

BS: *What is the best piece of career advice someone has given you?*
NJ: "Be brave and push yourself. Take opportunities as they come, that's how you will develop as a dentist." Dr Stephen Ripley, who is a Clinical Tutor at Manchester Dental School and the wisest GDP I know told me that. My advice? If you don't like something (for me that's molar endodontics), do more of it.

BS: *What are your career aspirations for the future? Do you see yourself staying in general practice?*
NJ: I really enjoy general dental practice. I think it is what I am good at and where I will stay. I love oral surgery, so would definitely like to do more of it, perhaps training to do implants. I don't think there is anything wrong with wanting to be a good family dentist providing good quality dental treatment and advice to the general public, not everybody can be, or should be, a specialist and good GDPs will always be very important to the world of dentistry.

BS: *Any regrets?*
NJ: I have no regrets, only lessons learnt - the nature of dentistry means things will not always go to plan. It's how we deal with them and learning from them that matters. Don't be too hard on yourself when it happens, pick yourself up, dust yourself off and stand a little bit taller because you're a little bit better for it now

BS: *Do you have somebody you look up to in the profession?*
NJ: There are many dentists, nurses and hygienists that I admire and respect but I have always looked up to my DCT Trainer. He taught me so much and was a brilliant dentist but he was always humble and his patients loved him. I think if you have that combination as a dentist you will have a very happy and fulfilling career.

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BDJ UPDATE

Stephen Hancocks OBE, Editor-in-Chief of the *BDJ* chooses his top picks from the recent crop of articles gracing the pages of this highly-respected journal.

Published twice a month, the *BDJ* is the leading dental journal in the UK and is, in addition, widely read internationally. It is available in hard copy with 20,000 readers an issue (included in BDA Student Membership for 4th and 5th year students) and online at **www.bdj.co.uk** (available to all BDA Student members) where it receives in excess of 100,000 unique visitors a month. It includes news, opinion, research, articles on dental practice and education.

Oral health and elite sports performance

Oral health is important for all of us, and all of our patients, especially so with the increasing links being made between oral health and general (systemic) health. With their accent on physical health and wellbeing it might be expected that elite athletes would include good oral health high on their list of priorities, as indeed would athletes and sportsmen and women. Not so according to a recent conference on sports dentistry, from which a Consensus Statement arose which we were pleased to publish in the *BDJ*.[1]

While the research base is limited, studies have consistently reported poor oral health in elite athletes since the first report from the 1968 Olympic Games. The finding is consistent both across selected samples attending dental clinics at major competitions and more representative sampling of teams and has led to calls from the International Olympic Committee for more accurate data on oral health. Poor oral health is an important issue directly as it can cause pain, negative effects on appearance and psychosocial effects on confidence and quality of life and may have long-term consequences for treatment burden. Self-reported evidence also suggests an impact on training and performance of athletes. There are many potential challenges to the oral health of athletes including nutritional, oral dehydration, exercise-induced immune suppression, lack of awareness, negative health behaviours and lack of prioritisation. However, in theory, oral diseases are preventable by simple interventions with good evidence of efficacy and the Statement made the following points and recommendations.

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- Oral health: Dental caries, dental erosion, periodontal disease and pericoronitis (infection around impacted teeth) are the principal oral-health conditions affecting athletes. Dental trauma in 'at-risk' sports is also recognised. The effect of poor oral health on athletes may have both short-term and long-term consequences. In the short-term, poor oral health can cause pain and distress, difficulties in eating and sleeping, reduced quality of life and impact on performance (see below). The long-term consequences include increased risk of tooth loss, increased treatment need and resulting functional and psychological impairments.
- Causes of poor oral health: There are many challenges to the oral health of elite athletes, some of which act at the level of the athlete and others within the peer, community and sport organisational level. These issues include nutritional challenges from frequent carbohydrate intake and acidic sports drinks, impairment of host responses owing to dehydration, mouth drying and intensive training, poor health behaviours and oral-health literacy and lack of effective health promotion/preventive support.
- Impact on performance: Emerging athlete self-reported evidence suggests that poor oral health negatively affects the training and performance of athletes. The mechanisms behind this effect might include pain, reduced wellbeing and quality of life and increased systemic inflammation.
- Improving and maintaining the oral health of athletes: Oral diseases are preventable with well-characterised interventions at low cost. Some interventions are more dependent on behavioural change and adherence to care than others. To achieve a sustained effect, oral health should be embedded within other aspects of health promotion taking into account the structural issues and inter-relationship of athletes within their sport and peer networks. Such an approach could, in addition, achieve mutual benefits for general health, well-being and performance.

In aiming to raise awareness of the issues of oral health in elite sport, the Statement recommends regular assessments of oral health by a dental professional, especially pre-season, to allow for personalisation of prevention plans and early treatment of any disease. Such an approach is good for all patients who participate in sport and conversely, knowing that a patient is sports-oriented provides a valuable way into discussing the importance of oral-health improvement and maintenance.

Digital dental technology

An important aspect of the *BDJ*'s content is Education both in terms of providing it and in reporting research and findings in relation to its development at undergraduate and postgraduate levels. A recent paper investigated the introduction of digital dental technology into BDS curricula.

The aim of this study was to determine the degree to which digital dental technologies have been introduced into the curricula of UK dental schools. A survey was carried out of all the UK dental schools that teach undergraduate dental students. The survey contained six questions and was designed to determine if digital dental technology techniques or systems were being taught in the curricula, what these techniques were, and whether the school dental laboratories supported these techniques. Sixteen schools were surveyed and 11 replied: a response rate of 69%. Forty-five percent of the schools that replied did not teach digital dental technology in their curriculum. Of the 55% of schools that did teach digital dental technology, 50% gave lectures or demonstrations while the other 50% allowed practical involvement by the student. Two-thirds of these stated that not all the students participated in practical use. Seventy-three percent of the schools that replied had dental laboratories using some, but not all, the digital dental technology techniques listed. Eighty percent of the schools that were not teaching digital dental technology said it was because it was not included in the curriculum, and 20% stated it was owing to a lack of technical expertise or support.

'Sheffield, the authors' school, has embraced digital technologies and all students have practical experience of digital techniques at some stage of their undergraduate course.'

The authors noted that not all dental schools currently appear to be at the forefront of, or indeed participating at all, in this digital area, with commercial companies and commercial dental laboratories leading the way with development and practical implementation. Sheffield, the authors' school, has embraced digital technologies and all students have practical experience of digital techniques at some stage of their undergraduate course. However, there have been significant barriers. Digital technology is not cheap and the school made an investment of £80,458 over the past two years to provide equipment; staff time was also provided to allow academic and technical teaching staff to train in the use of these technologies.

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If digital technologies and their novel materials are not introduced to dental curricula it will be difficult for newly graduated dentists to fully understand the range of new technologies available to them and for them to make informed decisions about the most appropriate techniques, systems or materials to choose from for different dental applications. Future dental materials research will also, inevitably, move more towards these novel techniques and if dental schools wish to remain at the 'cutting edge', investment in these new technologies is essential.

A novel solution may be to involve equipment manufacturers and commercial dental laboratories in undergraduate teaching and practical demonstrations. Both equipment manufacturers and commercial laboratories have a vested interest in introducing the dental undergraduate to digital dental technology, current techniques and materials choices.

In concluding that digital dentistry is here to stay and is allowing a new generation of restorative materials to be developed on the back of these production methods, the paper stressed that dental-school curricula must keep pace with this if students are to be able to make informed judgements in the future. Of the digital techniques taught by dental schools the computer aided design (CAD) and milling of appliances were the most commonly taught techniques.

Are you sitting comfortably?

We all love stories, a fondness which is often nurtured when we are children, either by being read to or by reading for ourselves. But what subliminal messages are being implanted when children read magazines aimed at them, especially in terms of oral health?

A study used 11 of the most popular UK children's magazines, which were selected and bought at four separate time points in 2012. The magazines were examined using content analysis and any references to food/beverages (in advertisements, free gifts, editorial and general content) were recorded. Although popular in the UK, children's magazine content is poorly regulated. Consequently, food and beverages high in fat, salt and sugar (HFSS) and detrimental to oral and wider health make unrestricted appearances. The study's aim was to assess the amount of HFSS food and drink children are exposed to while reading magazines; with particular focus on foods containing free sugars owing to their known cariogenic properties, and foods with low pH owing to their erosive potential.

Of the 508 food references observed, 73.6% (374/508) were for foods detrimental to oral health owing to their high sugar and/or acid content. 5.9% (30/508) were considered 'unhealthy' owing to their fat or salt content. 20.5% of references were for 'healthy' foods (104/508). The most common food categories referenced were baked goods (181/508) and sweets (86/508). Over one-third (36.4%, 16/44) of magazines came with free sweets. In terms of positioning, the food/drink references were predominantly found in the general content of the magazines, including the editorial spreads. Direct advertisements for food/drink only accounted for 9.6% (36/374) of the total number of references counted.

The summary was that food references within children's magazines are biased towards unhealthy foods, especially those detrimental to oral health. These permeate throughout the general and editorial content and are not restricted to direct advertisements. Magazine editors, journalists and illustrators are responsible for the editorial and general content of magazines. Without regulation, subliminal placement of advertisements within editorial and general content leads to 'advertorials' which are known to confuse children and parents alike. This study concludes that regulation may therefore need to cover more than just the direct advertisements. Dental professionals need to be aware of current trends in children's media when giving health-education advice or designing health-promotion initiatives.

References

1. Needleman I *et al.* Consensus statement: Oral health and elite sport performance. *Br Dent J* 2014; **217:** 587–590.
2. Chatham C. The introduction of digital dental technology into BDS curricula. *Br Dent J* 2014; **217:** 639–642.
3. Chapman KJ *et al.* Food references in UK children's magazines – an oral health perspective. *Br Dent J* 2014; **217:** E20.

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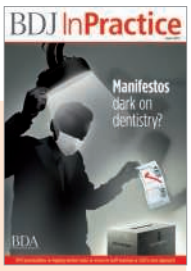
Stephen Hancocks ■

BDJ IN PRACTICE UPDATE

Selected by **Graeme Jackson**, *BDJ In Practice* editor



BDJ In Practice is the BDA's membership magazine and covers a range of business-focused topics. Formerly known as *BDA News*, the articles below featured in a recent issue. While they are aimed at established dentists, they are also relevant to young dentists preparing for their future careers.

Create a stronger password

Practice-computer users are being urged to create more-secure, complex, passwords. And they should avoid using words to which clues might be found on their social-media pages.

A survey from Cyber Streetwise has found that most people (75%) do not follow best practice by creating complex passwords.

Government-agency GCHQ says the key to creating a strong password includes using three words or more; using upper- and lower-case letters; including numbers; and adding a symbol. And there is a list of words that should be avoided.

"Most hackers will attempt to crack your password starting with variations of the below. There may even be clues on your social-media pages. You should change your password immediately if you're using any of the following or something similar," GCHQ advises.

- Pet's name
- Dates of birth
- Other family members' names
- Favourite holiday
- Current partner's name
- Significant dates
- Child's name
- Place of birth
- Something related to your favourite sports team
- Number sequences

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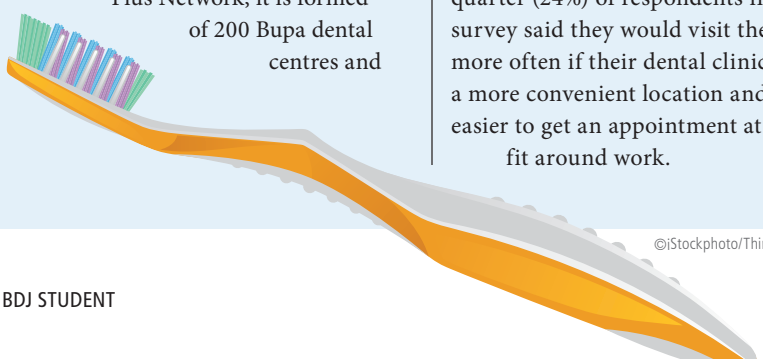
To come up with a more-secure password, GCHQ suggests when creating one to look around and pick three random things that you can see, like "plant", "chair" and "ink". Put these three words together and swap some of the letters for numbers and symbols like this: pl@ntCha!r1nk

And remember – the longer your password is, the harder it is to crack, GCHQ says.

Bupa bullish about expansion

Healthcare-group Bupa has launched a scheme to help its dental-insurance customers find practices close to their home or work. Called Bupa Dental Plus Network, it is formed of 200 Bupa dental centres and partner dental centres across the UK and the company plans to own 50 dental centres by the end of 2015.

The launch comes as nearly one-quarter (24%) of respondents in a Bupa survey said they would visit the dentist more often if their dental clinic was in a more convenient location and it was easier to get an appointment at a time to fit around work.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Online is today's landline

Government has launched a campaign to help small businesses, such as dental practices, do more online. The measures are part of the *Do More Online* campaign by the Department of Business, Innovation & Skills (BIS). Support includes £2 million for Local Enterprise Partnerships to help microbusinesses and sole traders increase their online presence. There are resources and advice on how small businesses can do more online at www.greatbusiness.gov.uk/domoreonline or by calling the business-support helpline on 0300 456 3565.

BIS entrepreneur-in-residence Simon Devonshire said: "British businesses should consider having a presence online as more important than having an office landline telephone number. Online is the new landline. A landline number used to be a mark of authenticity for businesses. The move to a digital economy has meant consumers are more likely to trust a business with a website and consider a business more credible if they offer the ability to transact seamlessly online."


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Graeme Jackson

BDJ TEAM UPDATE

By **Kate Quinlan**, *BDJ Team* editor

BDJ Team is a recent addition to the *BDJ* portfolio of publications and like its predecessor, *Vital*, is aimed at the whole dental team. *BDJ Team* is published online only and in 2015 will be published every month except for August and December.

To fulfil its goal of informing, educating and entertaining dental care professionals (DCPs), *BDJ Team* also provides one hour of verifiable continuing professional development (CPD) in each issue.

Fire awareness and fire safety

In the first issue of BDJ Team this year, former paramedic and medical-emergencies trainer Jon Kyle Anderson asked DCPs: "How would you react in a fire?" According to Jon's article, the causes of workplace fires include arson, faulty and misused electrical equipment, cooking, poor housekeeping, and smoking. Jon recommends that dental practices undertake a Fire Safety Risk Assessment (FSRA) to address the following questions:

- Have you identified anything that could start a fire?
- Have you identified anything that could burn?
- Who could be at risk?
- Who could be especially at risk?
- How will everybody escape?

The article goes on to discuss the classifications of fire; the 'fire triangle'; fire extinguishers and, of course, tackling a fire - or staying well clear.

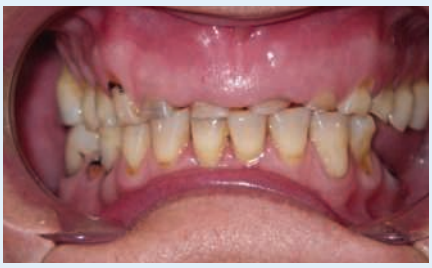
Jon also trains health professionals in resuscitation, anaphylaxis, defibrillation, manual handling and first aid.

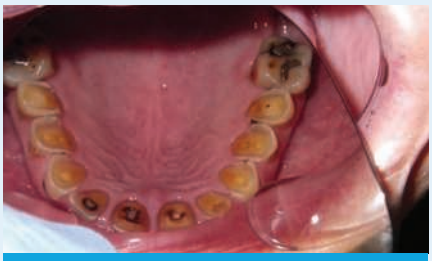
The full article is available at: http://www.nature.com/articles/bdjteam20158.

Dental nurses' career expectations

Ontario-based dental-hygienist Linda Douglas wrote an exclusive article for BDJ Team earlier this year on caring for patients with eating disorders. Linda described the oral, psychological and systemic complications of eating disorders; explained how to recognise the warning signs of eating disorders; described an evidence-based dental care and support protocol for sufferers; and increased readers' awareness of resources available for individuals with eating disorders.

Pictured in this photo gallery is a selection of images from Linda's article (Figs 1-4). To read the full text, visit http://www.nature.com/articles/bdjteam20159.





Figs 1-2 Severe dental erosion related to bulimic purging. Produced with permission from Dr S. Weinstein

Fig. 3 Erosive and abrasive lesions on the teeth of a 35-year-old woman with anorexia and bulimia (from BDJ 2014; 216: 463-468)

Fig. 4 Initial cervical erosive lesions in a young patient with anorexia (from *BDJ* 2014; **216:** 463-468)

The modified arrowhead clasp

James Green, Maxillofacial and Dental Laboratory Manager at Great Ormond Street Hospital for Children, introduced readers to the modified arrowhead clasp and related components. Here is an excerpt:

The Adams Clasp

Although a distinct component in its own right, the Adams clasp was seen as a development of the Schwarz arrowhead clasp and was introduced as the modified arrowhead clasp. Adams was a lecturer in orthodontics at Liverpool Dental School so the clasp has also been referred to as the Liverpool clasp and the term universal clasp has been used, too. Unlike with Schwarz's design, the arrowheads of the clasp do not fit beneath the contact points of two adjacent teeth but work by engaging the mesiobuccal and distobuccal undercuts of a single tooth, either standing in isolation or in proximal contact with the adjacent teeth. Adams also reported the following five benefits of his clasp:

1. Takes up minimal space in the buccal sulcus and in the baseplate
2. Can be used on any primary or permanent tooth
3. Can be used on a semi-erupted tooth
4. Strong and resilient enough for every retention purpose
5. Construction does not need specialised pliers.

To read more, go to http://www.nature.com/articles/bdjteam2014133.

Kate Quinlan ■

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theddu.com/guide

Question 1

Which one of the following conditions is associated with premature loss of teeth?

A. Down's syndrome

B. Hereditary gingival fibromatosis

C. Hypophosphatasia

D. Hypothyroidism

E. Williams syndrome

Question 1

ANSWER

C. Hypophosphatasia is an inborn error of metabolism in which there is a deficiency of the enzyme alkaline phosphatase, which is involved in hard-tissue formation. This condition results in bone and cartilage defects. The other conditions are associated with delayed eruption of teeth or failure of eruption of teeth.

REVISION

Test your knowledge with the following questions from **PasTest**

Question 2

Theme: Postoperative considerations

Options:

A. Canine space infection

B. Cavernous sinus thrombophlebitis

C. Hyperparathyroidism

D. Infra-temporal fossa

E. Pain and swelling

F. Paraesthesia of the distribution of the inferior alveolar nerve

G. Pterygomandibular space

H. Reactionary haemorrhage

I. Secondary haemorrhage

J. Trismus

For each of the following statements, choose the most appropriate option from the list above. Each option may be used once, more than once, or not at all.

Scenario 1:

A patient presents one day post-operatively and complains of bleeding.

Scenario 2:

This condition commonly occurs following an inferior alveolar nerve block injection, owing to involvement of the medial pterygoid muscle.

Scenario 3:

This is caused by the release of prostaglandins as a result of tissue damage.

Scenario 4:

This condition is characterised by marked oedema and congestion of the eyelids, leading to exophthalmos.

Scenario 5:

This space is involved when there is an acute infection of an upper third molar.

Question 2

ANSWER

Scenario 1:

H. Reactionary haemorrhage. This begins up to 48 hours postoperatively, and can occur in response to overexertion or dislodgement of the clot.

Scenario 2:

J. Trismus. A small haematoma may form in the area that is injected, causing mild trismus.

Scenario 3:

E. Pain and swelling. Owing to the haemorrhage and trauma, pain receptors are stimulated leading to pain.

Scenario 4:

B. Cavernous sinus thrombophlebitis. This is a rare complication in which infection spread can occur into the cavernous sinus.

Scenario 5:

D. Infra-temporal fossa. This is the anatomical space that is located posterior to the maxilla. Rarely, infection may spread to the infra-temporal fossa, and this can result in trismus.

Confident you know all there is to know about unilateral lesions? Keen to check the definition of an inflammatory odontogenic cyst? Test yourself in this and every issue of *BDJ Student* to ensure you keep on top of your revision.

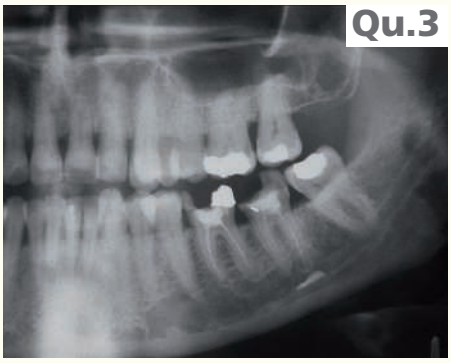
Question 3

Look at the radiograph.

A. What complication has occurred?

B What symptoms might the patient be experiencing?

C. What are the other causes of these symptoms?



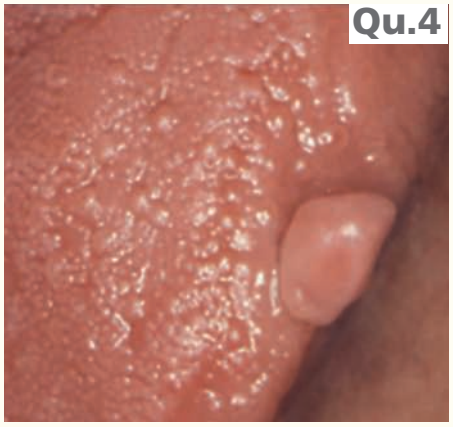
Question 3
ANSWER

A. There is radio-opaque matter in the inferior dental canal beneath the lower second molar. This tooth also has some radio-opaque material in the distal root canal. A root canal filling was being carried out and material has extruded through the apex of the tooth and has ended up in the inferior dental canal.

B. If material is in the inferior dental canal, it is likely that the patient will complain of altered sensation in the distribution of the inferior dental nerve, i.e. the lower lip. The altered sensation may be numbness (anaesthesia) or tingling (paraesthesia) and in some cases pain.

C. Other causes of altered sensation:

- Iatrogenic – trauma following surgery, e.g. surgical removal of wisdom teeth, lower premolars
- Infection – osteomyelitis
- Degenerative – multiple sclerosis
- Metabolic – tetany, diabetic neuropathy
- Neoplastic – space-occupying lesion.



Question 4

Please look at this lesion and indicate which type of biopsy is indicated and what you think the lesions are.

Question 4
ANSWER

Excisional biopsy – This is a fibroepithelial polyp.

HOW TO: ASSESS AND MAINTAIN DENTAL IMPLANTS

In her third article for *BDJ Student*, **Reena Wadia** discusses how to assess and maintain implants

Over the past decade, implantology has become an indispensable part of mainstream dentistry. I'm sure you've already assessed many patients with dental implants during your undergraduate clinics. If you haven't, you will very soon. Below are my answers to five commonly asked questions about dental implants, including their assessment and maintenance.

1 What are the components of an implant?

An implant consists of an osseous part that interacts with the bone, a transmucosal component that emerges through the mucosa and then the restoration, such as a crown, bridge or attachment for a denture. Implants are usually made from commercially pure titanium or titanium alloys. There are some newer implants made of zirconium (also a metal) but there are no long-term clinical trials for these as yet. Implants are generally threaded but have many design variations.

2 What should my assessment involve?

i) Always make a note of the oral hygiene of the patient, as well as the tone, colour and texture of the peri-implant tissues.

'Peri-implant disease is unarguably one of the most significant risks associated with implants. It is a multi-factorial disease that, if not diagnosed at an early stage, can ultimately lead to failure of the implant.'

ii) Gentle probing should be carried out routinely. Probing depths may differ around implants, owing to the depth that the implant has been placed. Therefore, probing depths around implants can sometimes be deeper than around teeth and still be healthy. Look out for any bleeding or suppuration on probing.

iii) If you detect a particularly deep periodontal pocket and there are signs of inflammation, a radiograph is recommended to evaluate any bone loss. Two millimetres of bone loss is generally acceptable in the first year, and 0.2 mm each year after.

3 What is peri-implant disease?

Peri-implant disease includes both peri-implant mucositis and peri-implantitis. Peri-implant mucositis is a reversible inflammatory reaction in the soft tissues surrounding a functional implant. Peri-implantitis is an inflammatory reaction associated with loss of surrounding bone around an implant. Peri-implant disease is unarguably one of the most significant risks associated with implants. It is a multi-factorial disease that, if not diagnosed at an early stage, can ultimately lead to failure of the implant. Treatment of peri-implant disease depends on the specific case and the aims of treatment. However, the treatment of peri-implantitis usually involves some form of surgery.

4 How do I maintain dental implants?

It is particularly important to go through oral-hygiene instructions with your patients. To maintain good gingival health, patients have to understand they need to clean underneath the reconstruction especially around molar teeth where the crown is much wider than the abutment. Using a single tufted brush for awkward areas can help improve plaque control.

There is no real consensus on which instruments are best to use to clean implants but plastic tipped inserts are now available to use with ultrasonic scalers. Hand instruments can be used gently being careful not to damage the titanium abutment.

5 How often should I be reviewing patients with dental implants?

Patients who have implants and a history of periodontitis should be seen once every three months and have six-point probing charts recorded on an annual basis. This may be more often if there are signs of problems. Other patients can be seen less often depending on their susceptibility to peri-implant disease but generally patients with implants should be seen at least twice a year. **Reena Wadia** ■

Dr Reena Wadia CV

1987	Born in London
2011	Graduated from Barts and The London
2011-2012	**DF1** at MK Vasant & Associates
2012-2013	**DF2** in Restorative Dentistry and Oral Surgery at Guy's Hospital
2013-2014	***Associate*** at Pure Periodontics
Present	***StR in Periodontology*** at Guy's Hospital
	Associate at Harley Street Dental Group and Woodford Dental Care

Other positions

Clinical Tutor at Barts & The London

BDA Committee Member, Croydon

FGDP Board Member, Central London

AUTISM SPECTRUM DISORDERS: WHAT ARE THE CHALLENGES?

Sarah Sacoor, winner of the *BDJ Student/King's Crown* writing competition, talks about the challenges of treating patients on the Autism Spectrum

BACKGROUND

"At King's College London we have a student-led dental newsletter called *The King's Crown*, which includes a variety of special features and news pieces. The newsletter has only been running for two years but we have already had such fantastic articles and writers that we thought it was a shame to confine them within the walls of our dental school. With this in mind, we decided to partner with *BDJ Student* and hold a competition to find the best *King's Crown* article, with the winning article published in the Spring issue. This is a fantastic opportunity to showcase the writing talents of King's College London dental students and a chance to pursue topics that interested them. We were overwhelmed by the response we received but eventually chose the winner. Sarah Sacoor wrote a thought-provoking and informative piece about Autism Spectrum Disorders. We hope others appreciate her article as much as we did, and we would also like to congratulate everyone who took part."
The King's Crown team

Autism is a lifelong developmental disability that affects how a person communicates with, and relates to, other people. It also affects how they make sense of the world around them. Having a brother with severe autism and learning difficulties, I am able to understand and appreciate his needs and the difficulties he deals with during his daily routine.

I would like to share ten potential challenges dental professionals could be faced with when treating autistic patients, hopefully giving greater insight into dealing with autistic patients in the dental setting.

1. Autism is a spectrum disorder: People with autism will be affected in vastly different ways, although they will share some common problems/characteristics. For example, my brother has severe autism with limited language and is dependent on full-time care. However someone with Asperger's syndrome (a form of autism) may be highly intelligent and independent. It is important that each patient's needs are assessed individually and treated accordingly.

2. Communication: A person at the milder end of the spectrum may have normal speech but display inappropriate reactions to certain situations. At the more severe end of the spectrum, there may be limited or no speech. It is useful to find out from their parent or carer the best way to communicate with them:

'An autistic person may display difficult behaviour. This could include self-injury or aggressive behaviour.'

e.g. through the use of picture cards. It should also be noted that people with autism find it difficult to interpret facial expression therefore verbal communication should be clear, simple and literal.

3. Sensory sensitivity: People with autism often have particularly heightened sensitivity. Their vision may be hypersensitive to the dental light or they may not like to be touched, so even a dental examination could prove difficult. Hypersensitive hearing could make it difficult to carry out treatment that involves

use of a drill and the strong taste and smell of toothpaste or filling materials may not be well tolerated. They may also be hypersensitive or hyposensitive to pain. Find out from parents or carers if there is anything to which they are particularly sensitive as it is most likely to affect your patient management and be sure to tell the patient what you are doing at every stage.

4. Challenging behaviour: An autistic person may display difficult behaviour. This could include self-injury or aggressive behaviour. Behavioural issues should be discussed with the patient's parent or carer and referral to a department of special care dentistry should be considered for treatment in the secondary healthcare setting.

5. Routine: A change in an autistic person's routine can be very disruptive and cause marked upset and distress. Therefore, it may be helpful to book appointments in advance so that the patient has enough time to plan and prepare, reducing stress and anxiety on the lead up to and during the appointment.

6. Diet: Owing to routine, hypersensitivity to some tastes and textures and dietary requirements, autistic people may be quite selective with their diet. For example, my brother has a high carbohydrate diet and needs to eat frequently throughout the day. Although the sugar frequency can be reduced in these patients, their diet cannot be completely controlled and a higher caries rate will be inevitable. Therefore, it would be wise to incorporate prevention of caries as a main focus of the treatment plan.

7. Poor oral hygiene: The texture of a toothbrush and the taste of toothpaste can be a challenge when it comes to maintaining oral hygiene. When someone else brushes my brother's lower central incisors, he tenses his lower lip making them impossible to brush. However, if he brushes them himself he does not remove an adequate amount of plaque. Therefore, we can only expect good oral hygiene to the best of the patient's or carer's ability. We can, however, try to ensure the patient has enough fluoride exposure through mouthwashes, fluoride varnish or a high-fluoride toothpaste.

'They may also be taking medications such as antipsychotics, anticonvulsants and antidepressants which can lead to xerostomia, gingival hyperplasia and bruxism and could impact on patient management.'

8. Medical conditions: Many people with autism suffer from other conditions, such as epilepsy, dyslexia, dyspraxia, ADHD and gastrointestinal problems. It is important to know their full medical history and how to manage related medical emergencies such as epileptic seizures. They may also be taking medications such as antipsychotics, anticonvulsants and antidepressants, which can lead to xerostomia, gingival hyperplasia and bruxism and could impact on patient management.

9. The appointment: The journey itself may be a challenge to the patient and they may already be quite distressed or agitated by the time they have reached their dentist. The time, day and length of the appointment should be planned according to the patient's needs and enough information given to the patient and their carer for prior planning and preparation. Some autistic patients will be specific about the timing of appointments and this should be catered for. For more severely autistic patients who are aided by full-time carers, consideration of the time it may take to prepare the patient for their day should be taken into account and carers consulted.

10. Access to services: If the patient exhibits challenging behaviour or will not allow the dentist to examine them it may be necessary to refer them to a specialist for treatments aided by sedation or general anaesthetic. My brother was fortunate to be treated at Guy's Hospital, but other areas in the United Kingdom do not have a special care department in the vicinity and the patient may be required to travel long distances for treatment. However, if the patient agrees, treatment can be carried out in general practice, especially if the patient is already comfortable with the setting and the staff.

Sarah Sacoor

PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE: MANAGEMENT CONSIDERATIONS FOR THE DENTAL TEAM

IN BRIEF

- Describes some of the medical and dental issues that will impact on the management of patients with chronic obstructive pulmonary disease (COPD) by general dental practitioners for example, candida infection with steroid inhalers and dry mouth symptoms.
- Explains why encouraging smoking cessation is important in preventing COPD.
- Concludes that better periodontal health may result in fewer exacerbations of COPD.

J. Devlin[1]

Chronic obstructive pulmonary disease (COPD) affects an estimated 3 million people in the United Kingdom, and is most common among elderly smokers. Patients may present with recurrent coughing of mucoid secretions (chronic bronchitis) or breathlessness caused by destruction of the airways (emphysema). If possible, it is advisable to treat the severely affected patients with them sitting upright in the dental chair as they may find it difficult to breathe when lying in the horizontal position. Periodontal bacteria can be carried into the lung where they can cause respiratory infection; therefore oral hygiene instruction should be emphasised in these patients. The objective of this article is to describe the oral and dental implications of chronic obstructive pulmonary disease. In particular, there have been a number of recent developments in the management of patients with COPD that have direct relevance to the dentist. The drug regime used in the treatment of patients with COPD can have profound implications for clinical dental practice, manifested as dry mouth or oral candidiasis. There is also increasing evidence of a link between COPD and both gastro-oesophageal reflux disease and periodontal disease.

What is chronic obstructive pulmonary disease (COPD)?

Older patients attending the dental surgery for routine treatment often suffer from respiratory illness. Chronic obstructive pulmonary disease (COPD) is a term that describes several lung diseases including chronic bronchitis and emphysema, which are characterised by reduced expiratory flow. Patients may use either term, but in clinical care this distinction is not a practical one to make as these are now regarded as one condition largely managed in similar ways. Chronic bronchitis is defined as the chronic production of sputum for at least 3 months a year for 2 successive years and emphysema is a condition in which the alveoli of the lungs are damaged and enlarged (Fig. 1). This is often the result of cigarette smoking over many years.

The implication for any restorative dental treatment is that patients with severe COPD often request to be treated sitting upright. The accessory muscles of respiration are more effective with the patient in the upright position. Oxygenation of the blood may be reduced in the supine patient with advanced COPD. In some patients, the chest and neck muscles are used to assist in the respiratory effort so that performing restorative dentistry on them can be difficult. In particular, the water spray and the application of rubber dam can further inhibit their already compromised breathing action.

What causes dyspnoea in emphysema?

The main pathology underlying the breathing difficulty seen in patients with emphysema is the irreversible loss of recoil of the alveoli during expiration (Fig. 2). Thus the patient with severe emphysema has to inspire more quickly on an already inflated lung to allow more time to exhale.

COPD also causes ventricular hypertrophy and pulmonary hypertension. The function of the right ventricle is to deliver deoxygenated blood from the body to the lungs where it is oxygenated and then it returns to the left atrium, and thence to the left ventricle of the heart. The oxygenated blood is pumped by the left ventricle to the body. In a patient unaffected by COPD, the circuit from the heart to the lungs is a low pressure system. The effect of smoking is to cause a reduction in the number and diameter of pulmonary capillaries as they are stretched over the larger alveoli air spaces.[1] In some patients with COPD, the increase in pulmonary vascular resistance causes an increased mean pulmonary arterial pressure greater than 20 mm/Hg (which is the definition of pulmonary hypertension).

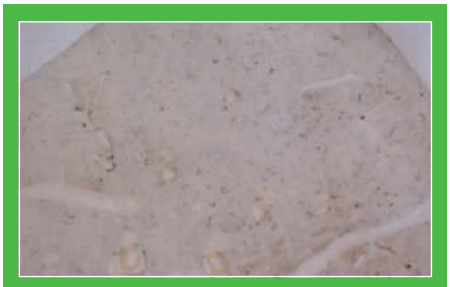


Fig. 1a Normal lung tissue showing a dense tissue structure

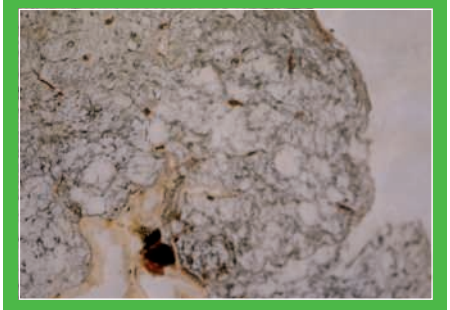


Fig. 1b Lung tissue with emphysema showing large, dilated alveoli

[1]Specialist Registrar in Respiratory Medicine, Bristol Royal Infirmary, Upper Maudlin Street, Bristol, BS2 8HW

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Email: joannadevlin@doctors.org.uk

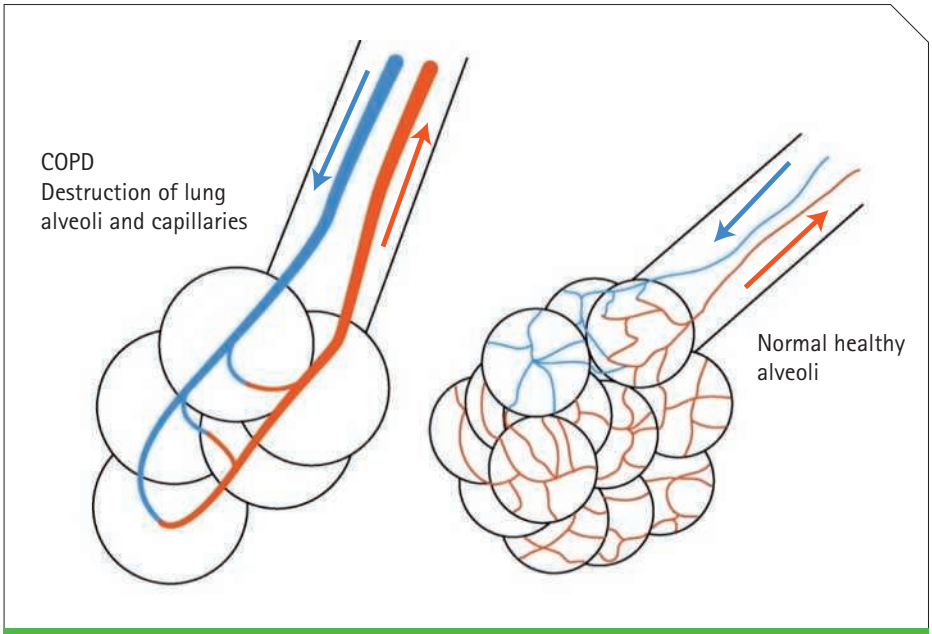

Fig. 2 In emphysema there is destruction of either the respiratory bronchioles or acini or both

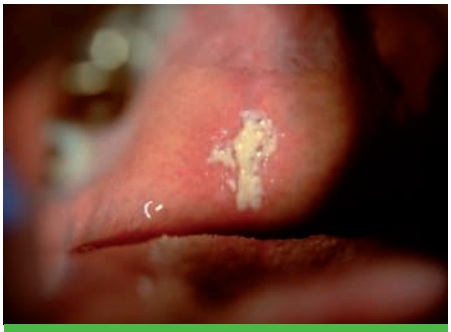

Fig. 3 Overgrowth of Candida albicans on the soft palate of a patient using inhaled corticosteroids

Patients with COPD and severe pulmonary hypertension suffer greater dyspnoea and have a shorter life expectancy.[2]

Adrenaline in local anaesthetic can be used with caution in patients with drug-controlled hypertension; the limit currently advised is two cartridges of 2% lidocaine with 1 in 80,000 adrenaline (equivalent to a dose of 45 µg of adrenaline).[3]

Management of COPD

The pharmacological options for treatment are limited, but inhaled short and long acting beta agonists, inhaled steroids and inhaled long acting muscarinic antagonists act to dilate the bronchi and reduce airway inflammation. Short-acting beta-agonists, such as salbutamol, can be taken before dental treatment to aid breathing.

Inhaled corticosteroids may be prescribed by a doctor for those COPD patients with severe and very severe airflow obstruction, where there is an exacerbation or persistent breathlessness.[4] Inhaled corticosteroids are associated with an increased risk of non-fatal pneumonia and oropharyngeal candidosis (Fig. 3).[5,6] Elderly people wearing complete dentures and patients who have taken repeated courses of antibiotics are particularly vulnerable to candidal infection, although all patients using a steroid-containing inhaler should be advised to rinse out their mouth having used it. A spacer device used with the inhaler can reduce the deposition of steroid in the mouth and contribute to reducing the risk of candidal infection. Patients having an exacerbation of their COPD may be prescribed oral corticosteroids. This is usually done for short periods to avoid the potential for adrenal atrophy, raised blood glucose levels and osteopenia/osteoporosis that may result in bisphosphonate prescription with the associated risks to oral health of this group of drugs.

The single medical intervention that confers the largest survival benefits for cardiovascular and lung cancer mortality in COPD is that of smoking cessation. As the dentist sees these patients regularly, encouraging patients to give up smoking is an important role. Drugs such as nicotine replacement therapy, varenicline and bupropion may be offered to patients who wish to give up smoking as part of the NHS stop smoking programme. Dry mouth may be a side effect of both drugs requiring the prescription of artificial saliva. COPD can result in mouth breathing, which causes further drying of the gingival tissues around the upper anterior teeth and gingivitis. It is not known whether there is also an increased prevalence of caries among patients with COPD.

The use of emergency oxygen

In the emergency situation where dental patients with COPD develop hypoxia, they will need to be given oxygen. A small minority of COPD patients are well acclimatised to hypoxia and rely on it to drive respiration. High flow oxygen may therefore have the effect of reducing their respiratory rate due to the loss of their hypoxic drive to respiration, putting the patient at risk of developing hypercapnic respiratory failure. The 2011 British Thoracic Society guidelines on the use of emergency oxygen suggest that all locations where emergency oxygen may be used must have pulse oximetry available.[7] Patients thought to be at risk of developing hypercapnic respiratory failure should have a target oxygen saturation of 88-92%, while the suggested target saturation range for most patients is 94-98%.[7] In an emergency, hypoxia kills faster than carbon dioxide related respiratory depression. This means that COPD patients who develop respiratory distress acutely in the dental setting should be treated initially with high flow oxygen. The oxygen flow can be reduced slowly if the respiratory rate drops. The protocol for administration of oxygen, the equipment used and the subsequent discharge of the patient to medical follow-up have been described by Jevon.[8]

Preventing exacerbations of COPD

The aspiration of high concentrations of virulent bacteria-contaminated saliva into the lungs may be a cause of pneumonia in debilitated patients. Periodontal disease and COPD are both chronic inflammatory diseases associated with a systemic inflammatory response that can present with acute exacerbations. In both of these conditions cigarette smoking is an important causative factor, leading to infiltration of polymorphonuclear leucocytes such as neutrophils and the release of proteolytic enzymes responsible for tissue damage. In assessing the relationship between COPD and periodontal disease, the role of smoking and age as potential confounding factors must be included in any statistical model to avoid a spurious relationship.

In a paper published very recently, edentulism was associated with a higher frequency of COPD-related hospitalisation and death than those with good periodontal health.[9] It is hypothesised that those who have lost their teeth through an exaggerated periodontal inflammatory response may also be susceptible to inflammation-induced incidents associated with COPD. High quality evidence is lacking and a causal explanation unproven, but it is assumed that better periodontal health in patients with COPD will result in fewer exacerbations of their disease.

'The pharmacological options for treatment are limited, but inhaled short and long acting beta agonists, inhaled steroids and inhaled long acting muscarinic antagonists act to dilate the bronchi and reduce airway inflammation.'

Lowering the barriers to effective dental care for patients with COPD

Research has shown that pulmonary rehabilitation programmes for patients with COPD are often poorly attended.[10] The reasons given by patients for non-attendance at both these programmes and dental practice appointments will probably be similar. Patients say that a lack of transport is important and those who are socially isolated and living alone are most likely to be affected. Patients who have severe disease have poor mobility, dyspnea and frequent hospitalisation, all of which make regular dental attendance problematic.

Can good periodontal health reduce the frequency of infective exacerbations of COPD?

The mouth is a reservoir for potential respiratory pathogens; methicillin-resistant staphlococcus aureus (MRSA) and *Pseudomonas aeruginosa* have been found to colonise the oral cavity of a proportion of patients with COPD.[11,12] Colonisation is thought to emerge as a result of antibiotic suppression of the normal oral bacteria and from the reduced salivary secretion often found in debilitated COPD patients. Bacterial pneumonia can subsequently result from aspiration of these organisms. When the sputum of patients with an exacerbation of chronic bronchitis was analysed, there were raised antibody levels against *Fusobacterium nucleatum* and *Prevotella intermedia*.[13] These are anaerobic organisms that have been implicated in chronic periodontitis.

In a prospective, controlled trial, Kucukcoskun *et al.*[14] found that periodontal treatment significantly reduced the frequency of COPD exacerbations. Although median exacerbations increased from two to three per year in the control group, which received no intervention, they declined from three to two per year in the test group, and this was thought to be due to reduced pathogen colonisation on the surfaces of teeth.[11] A recent joint position paper by the European Federation of Periodontology and American Academy of Periodontology found that there was no firm evidence of a causal link between COPD and periodontal disease. However, they acknowledged that the evidence for an association between aspiration of plaque organisms and pneumonia is much stronger.[15] It is important that both doctors and dentists continue to educate their COPD-suffering patients of the benefits of good oral and denture hygiene in preventing exacerbations.

Summary

Chronic obstructive pulmonary disease causes patients to suffer from dyspnoea, and this is likely to compromise any routine dental care. In understanding the pathophysiology, routine pharmacological management and its side effects, as well as the importance of good periodontal health in preventing both infective and non-infective COPD exacerbations, the physician and dentist can work together to provide a holistic approach to improving their patients morbidity and mortality.

References

1. Yamato H, Sun J P, Churg A, Wright J L. Cigarette smoke-induced emphysema in guinea pigs is associated with diffusely decreased capillary density and capillary narrowing. *Lab Invest* 1996; **75:** 211–219.
2. Weitzenblum E, Hirth C, Ducolone A, Mirhom R, Rasaholinjanahary J, Ehrhard M. Prognostic value of pulmonary artery pressure in chronic obstructive pulmonary disease. *Thorax* 1981; **36:** 752–758.
3. Brown R S, Rhodus N L. Adrenaline and local anaesthesia revisited. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2005; **100:** 401–408.
4. National Institute for Health and Care Excellence. *Chronic obstructive pulmonary disease (updated) CG101*. London: NICE, 2010. Online guidelines available at http://guidance.nice.org.uk/CG101 (accessed June 2014).
5. Suissa S, Patenaude V, Lapi F, Ernst P. Inhaled corticosteroids in COPD and the risk of serious pneumonia. *Thorax* 2013; **68:** 1029–1036.
6. Janson C, Larsson K, Lisspers K H *et al.* Pneumonia and pneumonia related mortality in patients with COPD treated with fixed combinations of inhaled corticosteroid and long acting β2 agonist: observational matched cohort study (PATHOS). *BMJ* 2013; **346:** f3306.
7. British Thoracic Society. *BTS guidelines for emergency oxygen use in adult patients*. BTS, 2008.
8. Jevon P. Emergency oxygen therapy in the dental practice: administration and management. *Br Dent J* 2014; **216:** 113–115.
9. Barros S P, Suruki R, Loewy Z G, Beck J D, Offenbacher S. A cohort study of the impact of tooth loss and periodontal disease on respiratory events among COPD subjects: modulatory role of systemic biomarkers of inflammation. *PLoS One* 2013; **8:** e68592.
10. Hayton C, Clark A, Olive S *et al.* Barriers to pulmonary rehabilitation: characteristics that predict patient attendance and adherence. *Respir Med* 2013; **107:** 401–407.
11. Scannapieco F A, Stewart E M, Mylotte J. Colonization of dental plaque by respiratory pathogens in medical intensive care patients. *Crit Care Med* 1992; **20:** 740–745.
12. Johnson W G, Pierce A K, Sandford A K. Changing pharyngeal bacterial flora of hospitalized patients. *Ann Int Med* 1972; **77:** 701–706.
13. Brook I, Frazier H E. Immune response to Fusobacterium nucleatum and Prevotella intermedia in the sputum of patients with acute exacerbations of chronic bronchitis. *Chest* 2003; **124:** 832–833.
14. Kucukcoskun M, Baser U, Oztekin G, Kiyan E, Yalcin F. Initial periodontal treatment for prevention of chronic obstructive pulmonary disease exacerbations. *J Periodontol* 2013; **84:** 863–870.
15. Linden G J, Herzberg M C, Working group 4 of the joint EFP/AAP workshop. Periodontitis and systemic diseases: a record of discussions of working group 4 of the Joint EFP/AAP Workshop on Periodontitis and Systemic Diseases. *J Periodontol* 2013; **84 (Suppl 4):** S20–23.

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