LETTERS TO THE EDITOR

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ANTIMICROBIAL RESISTANCE

The need to train clinical microbiologists

Sir, I was saddened to see the letter by Pankhurst et al. (BDJ 2016; 220: 2-3) referring to the previous lack of manpower planning in clinical oral microbiology. As postgraduate dental dean from 1998-2013, and then as the lead dean for the additional dental specialties from 2000-2012 and as Chair of COPDEND 2006-2012, I, along with the postgraduate deans, consistently argued for the need to train specialists in clinical oral microbiology. We obtained some NHS funds from the then CDO England, Professor Bedi, for two training posts, one each in Bristol and London; after some initial problems, the Bristol funding was moved to London. I liaised with the Lead Postgraduate Medical Dean for Microbiology about training, and colleagues in oral microbiology developed a curriculum in collaboration with the Royal College of Pathologists (then responsible for medical microbiology training) that was eventually approved by the GDC Education Committee (I believe this committee no longer exists).

Attempts to obtain funding for further training posts, as the number of Consultants in Oral Microbiology (COMs) depleted to the point that there were only a few COMs remaining in the UK (and that there were few such colleagues to advise the DH or, as then, the PCTs), were frustrated by comments by a senior member of the profession, at national committee level, that we were managing alright without such properly trained colleagues. Even then we knew there were problems developing with antimicrobial resistance and that both medical and dental GPs were over-prescribing antibiotics. This has all been brought into sharp focus recently by statements from the Chief Medical Officer for England, Dame Sally Davies, as we enter a post antibiotic era.

Recruitment into clinical oral microbiology was also an issue because potential trainees (and postgraduate deans) were uncertain whether there would be NHS consultant or senior clinical academic posts for those completing training to apply for. In

IMPLANT DENTISTRY

Understanding CBCTs

Sir, over the years I have noticed the number of articles dealing with the provision of implants as a treatment option. These articles mention the types of bone that can be present for implant therapy using a classification system used by Lekholm and Zarb¹ labelling bone from D1-D4 types.

Not to be controversial but this type of classification is a misnomer and the teaching of this only prevents the clinician from truly understanding the complexity and importance of the recipient bone in relation to implant dentistry.

This can be easily evident on the examination of a cone beam computed tomography (CBCT) image which is commonly taken pre-operatively. As one that limits work to dental implants it has been rare to find an area of bone that is described and conforms perfectly to the Lekholm and Zarb bone classification.

I would advise colleagues to get a better understanding in examining and reading CBCTs in detail before implant surgery.² It is far better to take into account the quality and quantity of the

local bone and other specifics such as: the cortical thickness, the marrow spaces within, Hounsfield Units, the density of the spongy bone, the large trabecular radiolucencies etc. All of these factors can influence the primary stability and success rates of an implant and can be deduced pre-operatively, rather than labelling it into a specific class of bone post-operatively.

I would advise colleagues to be aware of the limitations in trying to classify the recipient bone into a specific group and to obtain further training in CBCTs as recommended by the British Society of Dental and Maxillofacial Radiology.³

G. Pynadath, by email

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addition, UK dental schools have had to rely on non-clinical colleagues to provide undergraduate teaching in clinical oral microbiology. Whilst I know that these colleagues do a sterling job, first hand experience of prescribing by clinicians is also very important. Colleagues in the medical and dental specialties who need the advice of clinical oral microbiologists have long since had to make do without. I know from my time in Sheffield, when we had such a specialist, that our clinicians benefitted from such advice.

Training in clinical oral microbiology has required the support and input from colleagues in medical microbiology and virology and, at one time and in a number of places, that was willingly given. During the last few years of my chairmanship of COPDEND, and while therefore sitting on

the Postgraduate Medical Deans Committee, I was privy to the discussions on the changes being argued and devised, in conjunction with the GMC, for a new curriculum that would incorporate medical microbiology and virology into the medical training programme for infectious diseases. That new curriculum has now been approved and it does make it more difficult to obtain oral microbiology training. However, with goodwill and helpful colleagues in infectious diseases, we know this can be achieved. Before I retired as postgraduate dean, I had fruitful discussions with local medical colleagues in medical microbiology and virology, about future training in clinical oral microbiology, aided valuably I should say by one of the authors of the recent BDJ letter referred to at the beginning of this correspondence,

who was then one of the London trainees.

It should be noted that approximately four years ago the Chair of the Joint Committee for Postgraduate Training in Dentistry (JCPTD), Professor Jon Cowpe, established a small working group with the small cadre of clinical oral microbiologists remaining to see what could be achieved. JCPTD's membership includes representation from all stakeholders involved in dental education and training in the UK. A position paper was produced, which included a series of proposals. This was circulated widely along with discussions with key senior stakeholders in dentistry. Members of the group have continued to try to stimulate support for the specialty but unfortunately despite their best efforts, there continues to be no clear outcome.

I hope that in the light of the letter by Pankhurst *et al.* and my reply, this might stimulate senior colleagues in the NHS and academia to reconsider how best to take forward the need to train clinical microbiologists for the future.

C. Franklin, Sheffield DOI: 10.1038/sj.bdj.2016.153

A very big nut to crack

Sir, I read with interest the letter by Pankhurst et al. (BDJ 2016; 220: 2-3) advocating the creation of more consultant oral microbiologists to 'provide a high calibre skills base...[to] modernise the surveillance of [antibiotic] drug resistance' as highlighted by the O'Neill report. This expanded group would mainly continue to 'oversee instrument decontamination and antibiotic stewardship' (presumably by educating and re-educating medical and dental professionals). On page 5 of the same issue in the BDJ in the 'News' section we learn that 'The rise of resistance to antibiotics is largely a consequence of human action and is as much a societal problem as a technological one' and the Economic and Social Research Council have recently been funded to look at this from the social science angle and raise awareness in that field.

This sounds a bit like climate change to me. We can all 'see' the problem, but vested interests, money and various other territorial and political standpoints will increase the numbers of related conferences and discussions exponentially but antibiotic resistance and over-prescribing will remain a very big nut to crack. I also read the other day that medical GPs' remuneration is partly based on 'patient satisfaction' – which could further muddy the water in the UK in respect of antibiotic prescribing.

Where does that leave us as humble UK dentists? So long as we continue to see

patients who have been prescribed a course of antibiotics for a draining endodontic sinus then we must be prepared to admit that we have a problem. And that could be addressed by bypassing most of the above.

S. Jones, Newbury, Berkshire DOI: 10.1038/sj.bdj.2016.154

DENTAL EDUCATION

Too many graduates in India

Sir, gone are the days when the dental profession in India was considered elite and luxurious. The present scenario is very gloomy because of the greater number of dental graduates added each year (approximately 30,000)¹ to the already existing workforce without many career prospects. Presently 310 dental colleges exist in India² and the majority have an intake of 100 students per year. The bulk of the fresh dental graduates pursue the dream of a clinic, the next majority opts for postgraduate study, and a few aspire to clear the board requirements of a foreign country and become certified dentists.

A fledgling dentist in India has very limited scope to survive on his own immediately after graduation. The cut-throat competition among fellow dentists has escalated to unprecedented levels and a sense of insecurity seeps into fresh graduates. The recent threat to private practice is the rapid surge of corporate dentistry and the blistering pace at which they grow and multiply, making it almost impossible for a recent graduate to make an independent living. We conducted an informal survey among recent graduates and the majority (76%) reported working an average of ten hours per day even on weekends for 200 to 300 dollars a month and it appears as if new dental graduates are the most exploited workforce. The few who pursue postgraduate studies find it difficult to get into a specialty of their choice since only 3,000 seats exist.3 Moreover, it's a trend among the of majority private institutions to levy huge capitations to procure admission and the scarcity of government college seats compel many to pay a fortune. Finally after postgraduation, they end up with the same career choice as an undergraduate because of the lack of new opportunities and 'survival of the fittest' competition. There seems absolutely no regulation by the dental council to limit the number of dental graduates and the level of unemployment increases because supply surpasses the demand. It is estimated that there will be a surplus of more than 100,000 dentists in India by 2020.³

The current scenario poses a serious threat to the professional integrity of fresh

dental graduates and the percentage of dentists committing suicide is on the rise; the main reasons being unemployment and a sense of hopelessness.⁴ It is high time for the dental council and government of India to take all necessary steps to improve the condition of dentistry and dentists of this nation before hope deteriorates completely.

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Student burnout

Sir, relatively few dental professionals or dental students are alert to the signs, symptoms, implications and best means to avoid burnout. In a study by Denton *et al.*¹ 18.5% of dentists were found to have existing or previous signs of burnout in two of the three diagnostic domains. Students are at just as much risk, with a recent survey of medical students reporting that one in three had experienced a mental health problem while at university.² Worryingly, more than 80% felt that the support for such issues at university was poor or moderately adequate.

Burnout is described as comprising three dimensions: increased emotional exhaustion – fatigue caused by the stress of work; increased depersonalisation, with the development of negative and cynical attitudes; and reduced levels of personal accomplishment, accompanied by feelings of diminishing competence and self-achievement. According to the systematic review by Singh *et al.*,³ the risk factors for burnout in dental professionals are younger age, being male, certain personality types, participation in clinical degree programmes, long working hours and high levels of stress and responsibility.

The key to the management of burnout is early identification and prompt, effective intervention. Unfortunately, many individuals susceptible to and suffering from burnout work long hours under large amounts of stress, with little, if any time to recognise that they need help or seek support. Resting – taking time out, rather than just reducing working hours, is widely accepted as being an effective treatment.

Tackling burnout at the student level has many advantages in helping to equip