

September

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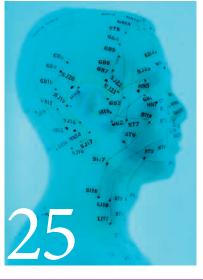
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Ed's letter

'The opportunities are endless,' says dental nurse Faye Greenhalgh of her decision to become a dental nurse.

In the ten years since Faye qualified, she has scooped up three further qualifications (in sedation, oral health and fluoride application), become Project Development Manager for Revive Dental Care's innovative 'Hard to Reach' service, and found the time to have two children. Read more about Faye's experiences and those of two of her colleagues in Greater Manchester in the cover story of this issue of BDJ Team.

Dental hygienists and dental therapists are also in the spotlight this month. Our CPD article explores the stress and well-being of dental hygiene and dental therapy students at the University of Portsmouth

Dental Academy during their undergraduate training. The second part of dental hygienist and therapist Laura Cox's research into alternative methods of gag reflex control focuses on acupuncture; Michaela ONeill, immediate BSDHT Past President explains the BSDHT's and BADT's mission to secure prescribing rights for dental hygienists and therapists and how you can help their campaign; and Len D'Cruz explores the ins and outs of offering private dental hygiene services in a mixed general dental practice.

BDJ Team is increasingly publishing original research from DCPs such as Laura Cox

(mentioned above). To encourage those of you out there involved in research to submit your work publication, we are pleased to have launched portal. You can read more about it in the if you would like to submit research kind of article for BDJ Team, please visit on 'submit'.

Everyone is welcome to send an article!

to BDJ Team for possible our own manuscript submission news section this September, and

or any other

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Mission to prescribe,

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Oral Health Conference to be held in Harrogate



OUTCRY OVER DECISION ON HPV VACCINATION

There has been wide condemnation of the news that the Joint Committee on Vaccination and Immunisation (JCVI) has decided not to recommend an extension of the Human Papilloma Virus (HPV) vaccination to school age boys.

HPV has been linked to one in 20 cases of cancer in the UK. Health campaigners have called for a gender-neutral approach to vaccination, which would ensure 400,000 school-age boys are not left at risk.

Up to 80% of sexually active people will be infected by HPV at some point in their lives. Five percent of all cancers are caused by HPV and some of these, notably oral cancers, are now rising sharply in incidence. HPV-related cancers such as anal cancer are also among the hardest to diagnose and treat.

A recent poll published by the campaign coalition HPV Action for World Immunisation Week (24-28 April) showed that 97% of dentists backed expansion of the programme, with the same proportion saying if they had a son they would want them to receive the vaccination.

This initial recommendation by JCVI will now be subject to a public consultation, and the British Dental Association (BDA) will make representations to the Committee urging them to reconsider the evidence before they make their final decision in October.

BDA Chair Mick Armstrong said: 'JCVI's unwillingness to expand the vaccination programme to boys is frankly indefensible. The state has a responsibility to offer all our children the best possible defence. Dentists are on the front line in the battle against oral cancer. Ministers can choose to sit this one out, or show they really believe in prevention'.

Dr Mick Horton, Dean of FGDP(UK), said: 'It is astonishing that the Government's vaccination advisory committee is planning to recommend that men are not given a level of immunity which the NHS already provides to women, and from a vaccine which it acknowledges is just as effective for men. The JCVI's position will cost lives, and as it consults it should start listening to the dentists and doctors who see the devastation that HPV-related cancers wreak on patients and their families'.

The British Association of Dental Nurses (BADN) also condemned the decision and President Jane Dalgarno said: 'BADN supports the HPV Action campaign and calls upon its members to lobby their MPs to make them aware of the seriousness of this matter'.

This year's Oral Health Conference and Exhibition will be held on 3-4 November 2017 at Harrogate Convention Centre. The event is the highlight in the British Society of Dental Hygiene and Therapy's (BSDHT's) calendar.

Offering first-class clinical education, hours of CPD and an opportunity to network with colleagues, experts and industry, there will be something for all dental hygienists and dental therapists to enjoy.

The extensive programme will be presented by speakers at the cuttingedge of the profession. Whether you're looking for regulation updates, advice on clinical procedures, ideas to help boost patient communication or inspiration for career development, the BSDHT has you covered.

The event will also once again host the Annual Poster Competition, sponsored by Waterpik International, Inc. This is a great opportunity for you to share your passion, commitment and research with the wider profession, plus, you'll be in with a chance to win a fantastic prize.

Entitled 'More to the Mouth', the Oral Health Conference and Exhibition is the ideal platform for modern dental hygienists and dental therapists to get up-to-date with the very latest in field.

For more information and to book, visit www.bsdht.org.uk/oral-healthconference-and-exhibition.

Dental nurses

and 18 November 2017

The Conference programme, which offers seven hours of verifiable CPD, will include presentations on Healthy Habit Formation; Dentaid in the UK and Overseas; Dental Nursing in Oman; Dementia; and What the Butler Saw! Care and Maintenance of Decontamination Equipment. Matthew Hill, Executive Director, Strategy at the General Dental Council (GDC) will be delivering a GDC Update on Friday, and GDC Head of Standards Janet Collins will be closing the Conference programme with a dental nurse specific presentation on Enhanced CPD, which will be introduced for dental care professionals (DCPs) from August 2018, on Saturday.

Dental nurses (and other members of the dental team) can attend Conference on either or both days, with discounted rates for current BADN members. There are also special rates for student dental nurses, and anyone booking before 6 October 2017 will enjoy special early bird rates. Conference fees include the opening/ closing ceremonies, conference programme, conference handbook, and e-CPD certificate, as well as refreshments and buffet lunch. There is also an optional informal dinner on Friday evening. The BADN Annual General Meeting, open to members only, will be held on Friday afternoon.

Online registration is now open and everyone on the BADN distribution lists will have been sent an e-invitation to register. More information, and a link to the registration site, is also available at www. badn.org.uk/conference.

BDJ TEAM NOW ACCEPTS MANUSCRIPT SUBMISSIONS

BDJ Team, the BDJ Portfolio's online magazine for the whole dental team, has launched its own manuscript submission site, to encourage original submissions from dental care professionals (DCPs) involved in research.

BDJ Team was launched in 2014 and is published ten times a year on a dedicated website and offers DCPs free verifiable continuing professional development (CPD) through the British Dental Association's (BDA's) CPD Hub.

BDJ Team publishes a broad spectrum of articles aimed at DCPs, including interviews and features, news, letters, dental product information, and research. Recent original content published on the BDJ Team site includes:

- Treatment of dental caries under general anaesthetic in children (http://go.nature. com/2utn3tK)
- Paediatric dentistry and the dental team



(http://go.nature.com/2pO18JE)

Exploring alternative methods of gag reflex control. Part 1: Acupressure (http:// go.nature.com/2eJUjqW).

BDJ Team's manuscript submission site mirrors those currently used by the BDJ and by BDJ Open, and enables easy tracking of articles and peer review as required.

If you are interested in submitting an article relevant to the DCP audience to BDJ Team, visit http://mts-bdjteam.nature.com/cgi-bin/ main.plex, or visit www.bdjteam.co.uk and select 'submit'. All article types are welcome on the site. For more information and guidance please email the BDJ Team Editor Kate Quinlan on bdjteam@nature.com.

CDS TEAM ARE A BIG HIT AT COMMUNITY SHOW



North East London's Community Dental Service recently spent their weekend volunteering their time to promote oral health at the Annual Mayor's Newham Town Show.

The service has been involved in the show for several years and this year made a record 3,478 contacts at the oral health stand, teaching children and parents about oral hygiene, dental-specific diet advice and going to the dentist.

The team included oral health promoters, dental therapists, dental nurses and dentists.

Natalie Bradley, who wrote to BDJ Team, said: 'Everyone had lots of fun. It was incredible to see such genuine interest from the public and eager children filling in our quizzes and word-searches or brushing our set of giant teeth.

'As well as our oral health stand, we were able to provide oral health screening on our mobile dental unit. Over the two days we saw 485 adults and children for oral health screens, many of whom required signposting to dentists as they required treatment.' Luckily the weather was on the team's side and with live music playing in the background and copious amounts of free toothbrushes and toothpaste to give out, there was a lively and festival-like atmosphere inside the unit that helped to acclimatise some of the more nervous or younger children into learning how a visit to the dentist can be fun.

Natalie said: 'I think getting the dental profession more involved in events like this is essential at tackling our public health issues head on and it can be really effective. Bring on next year!'





Professor **Andrew Eder**¹ considers the damage that can be caused to the teeth if patients are too heavy-handed with their toothbrushing, as well as exploring other potential causes of abrasion and offering preventive advice to be passed on to patients.

¹ Professor Andrew Eder is a Specialist in Restorative Dentistry and Prosthodontics and Clinical Director of the London Tooth Wear Centre, a specialist referral practice in Central London. He is also Professor/Honorary Consultant at the UCL Eastman Dental Institute and Pro-Vice-Provost and Director of Life Learning at UCL.

The London Tooth Wear Centre offers an evidence-based and comprehensive approach to managing tooth wear, using the latest clinical techniques and a holistic approach in a professional and friendly environment.

www.toothwear.co.uk

he Oxford Dictionary of Dentistry defines 'abrasion' as: 'The non-bacterial loss of tooth tissue due to frictional tooth wear by extrinsic agents. Common causes are toothbrushing, particularly with abrasive pastes, pipe smoking, and pencil chewing. The lesions produced by toothbrush abrasion are typically wedge-shaped and are most commonly associated with the labial and buccal surfaces of the premolars, canines, and incisors of the permanent dentition'.

These are not the only cause of abrasion – you can add to the list a diet rough in texture or using the teeth for a purpose other than nature intended, such as biting tags off new

purchases, or cleaning between the teeth with tools not created for that purpose, for instance earring posts, keys and credit cards!

A patient suffering from tooth wear may report sensitivity, as well as problems chewing. Their teeth may also look shorter on smiling or when speaking. In addition:

- Teeth may become less white as some of the outer surface is lost
- Front teeth may become sharp or chipped
- Chewing surfaces may wear flat and take on a shiny, pitted appearance
- Restorations such as crowns and bridges may stand proud of the natural teeth.

Patient awareness and education
Raising awareness and educating our patients

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about the potential for abrasive tooth wear is essential if we are to prevent further damage. Thus, for example, an important message to share is the importance of gentle but effective brushing – in my experience, many people mistake brushing hard for brushing well! It may be appropriate for the dental professional to demonstrate the best technique for the patient, and to recommend the use of a soft toothbrush and non-abrasive toothpaste.



The reality of wear

As Wiegand and Schlueterwrote: 'Although toothbrushing is considered a prerequisite for maintaining good oral health, it also has the potential to have an impact on tooth wear, particularly with regard to dental erosion. Experimental studies have demonstrated that tooth abrasion can be influenced by a number of factors, including not only the physical properties of the toothpaste and toothbrush used but also patient-related factors such as toothbrushing frequency and force of brushing. While abrasion resulting from routine oral hygiene can be considered as physiological wear over time, intensive brushing might further harm eroded surfaces by removing the demineralised enamel surface layer'.1

Added to this, there is no doubt that tooth wear is on the increase: over three-quarters of adults show signs of tooth wear. Comparing the most recent Adult Dental Health Survey (ADHS) with its predecessor, figures suggest that in just 11 years the incidence of tooth wear in England has increased by 10%.²

Our awareness of these issues – combined with proactive patient care – is key to helping the UK population achieve dental longevity, as well as keeping them pain-free. In addition, while this article has focused on abrasion, it

SOME OF THE MORE COMMONLY CONSUMED

FOODS THAT CAN CONTRIBUTE INCLUDE

CELERY, CARROTS, BROCCOLI, SEEDS AND NUTS...'

Meanwhile, as already mentioned, foods with a rough texture will make matters worse, so it is worth having a discussion with patients about their diet. As a rule of thumb to share with them, if it's tough to chew and/or fibrous, it may well be abrasive. Some of the more commonly consumed foods that can contribute to abrasion include celery, carrots, broccoli, apples, seeds and nuts.

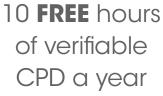
It is also very important to make sure patients understand their teeth are not a handy tool, for example to tear labels off newly bought items or to rip open packets of sweets when their hands fail them! In addition, many people chew foreign objects such as pens and pencils, very often without realising. If a discussion with your patient brings such an issue to the fore, it might be worth suggesting they coat their chew-item of choice with a bitter-tasting solution designed for nail biters.

is important to note that tooth wear is multifactorial and should not be considered in isolation – abrasion, erosion, attrition and abfraction are rarely seen in isolation (if ever), and may affect people from all walks of life at any age.

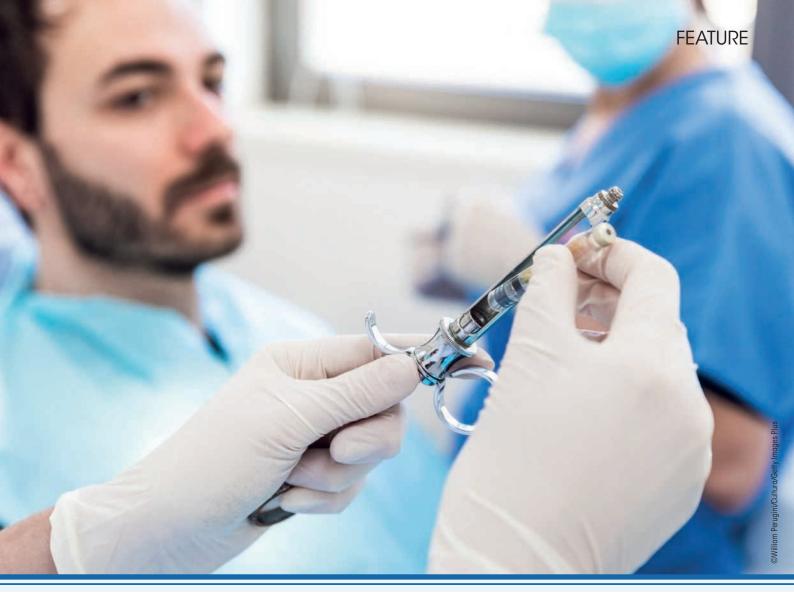
The stark truth is that if patients remain unaware and uneducated about the potential for tooth damage through tooth wear, patients will continue with their destructive habits, which will have serious implications for their oral health in years to come.

- 1. Wiegand A, Schlueter N. The role of oral hygiene: does toothbrushing harm? *Monogr Oral Sci* 2014; **25**: 215-219.
- Adult Dental Health Survey 2009. Report
 Disease and related disorders. Health and Social Care Information Centre, 2011.









Prescribing for patients: help us do our job



In this article, originally published in *Dental Health* in July, the BSDHT and BADT interview **Michaela ONeill** (pictured) and explain their mission to secure prescribing rights for dental hygienists and dental therapists, and the process for doing so.

Introduction

The British Society of Dental Hygiene and Therapy (BSDHT), in collaboration with the British Association of Dental Therapists (BADT), is currently going through a robust process of applying for prescribing rights with exemptions, for the benefit of all members of the dental team and, most importantly, for patients. This was reported in *BDJ Team* in June (http://go.nature.com/2srBfma).

Immediate BSDHT Past President Michaela ONeill is working closely with BADT Immediate Past President Fiona Sandom as joint project lead. *Dental Health* (DH) caught up with Michaela (MON) and asked if she would mind explaining the process.

NB: *Dental Health* is BSDHT's scientific journal: http://www.bsdht.org.uk/publications/dental-health.

DH: Michaela, BSDHT is engaged in a process to obtain prescribing rights, for which we have asked our members for help and support.

Can you please explain what you mean by 'exemptions' in relation to prescribing for our patients?

MON: Having exemptions in place means that our profession would be exempt from needing a prescription for certain prescription-only medicines (POMs). So we could use anything on our list of exempt medicines (after certain training) in our daily practice without a prescription, Patient Specific Directive (PSD) or Patient Group Directive (PGD).

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DH: It seems ludicrous that we are unable to prescribe local anaesthesia (LA) or fluoride varnish. Why can we not prescribe in the same way a dentist does?

MON: Unfortunately, we don't have the same capacity that doctors and dentists do. No Allied Healthcare Professional does. We cannot prescribe LA and then use it on the patient, as a dentist does. If we had independent prescribing the patient would have to take the prescription we have written to a pharmacist and then return with the required LA for us to use. This is quite a convoluted procedure and not conducive to a time managed clinic.

DH: Having the ability to prescribe the necessary medication and medicaments is obviously essential. Can you share some of the background to the process?

MON: The 1999 Crown 'Review of Prescribing, Supply and Administration of Medicines' was pivotal in expanding medicines mechanisms of supply, administration and prescription to non-medical statutory regulated professions. This work led to a revision of the medicines legislation, both in respect of available legal frameworks and specific professions entitled to work under the arrangements. Ultimately this was for the purposes of 'bringing advantages to patient care, including timely access to treatment, a reduction in patient waiting times and an appropriate use of professional skills' (Crown 1999).

After a few years of lobbying for a change in the dental hygienist and therapists' ability to use POMs, BSDHT and BADT jointly met with NHS England and were included in a scoping project to assess if our professions' needs in this area warranted inclusion in the next batch of proposals to change the legislation.

In January 2016 BSDHT and BADT started working towards exemptions by gathering information and putting together a case that exposed the limitations of our existing arrangements. Our needs were explained by examples collated by both professional organisations.

As a result of an internally commissioned Chief Professions Officers' Scoping Project: Medicines Prescribing, Supply and Administration Mechanisms (2009), a number of recommendations were made for further work.

A report from the programme board recommended that a number of healthcare professions be considered for supply and

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administration of medicines mechanisms, with prioritisation being given to professions which would demonstrate benefits to a wide patient population and are aligned with the Five Year Forward View and NHS England's business priorities for 2017/18, resulting in a decision to progress the work towards the use of exemptions by dental therapists and dental hygienists.

The results of this identified that we were to go through to the next stages in a stream of Allied Healthcare Professionals (AHPs) called phase A. There were other AHPs in the scoping project that have been allocated different phases. We were one application in a group of ten from various AHPs undertaken by NHS England and Chief Professionals Office who are the programme board.

There are ten professions at various stages of application for either prescribing responsibilities or supply and administration of medicines at this time. Currently:

- Paramedics and diagnostic radiographers are applying for independent prescribing
- Pharmacy technicians are going through a scoping project
- Physiotherapists and podiatrists are reviewing the limited drugs they can independently prescribe
- Paramedics are reviewing their exemptions list
- Clinical scientists, biomedical scientists and ODTs are applying for PGD
- We are applying for exemptions.

DH: Can you tell us who will be involved and working on our behalf?

MON: The professional bodies represented on the programme working group are responsible for the collection and collation of the relevant information. This comprises: Senior Responsible Owner, Janet Clarke Deputy CDO England; a programme lead; a programme manager; professional bodies representation, Fiona Sandom and myself; a programme co-ordinator and a programme officer. NHS England Medical Directorate has financed the project for all except the professional bodies' time.

Janet Clarke will also represent our working group on the programme board which is responsible for steering all of the various applications through this process.

DH: What are the main objectives of this working group?

MON: We have identified several objectives. Essentially, the project will:

- Engage experts and resources to work up a clear case of need which will include an outline of clear accountability and governance arrangements for use of exemptions
- Define clear scenarios where the use of exemptions by dental therapists and dental hygienists would benefit patient care without compromising safety
- Build the case for change and opportunities for improvements associated with the use of specific exemptions in medicines legislation by dental therapists and dental hygienists
- Gain confirmation from NHS England medical directorate senior management team that the case of need is aligned with NHS England objectives and priorities
- Have the proposal considered by the Department of Health Non-Medical Prescribing (NMP) board to prepare a case for presentation to ministers to gain approval for further work to be undertaken to progress to public consultation
- Undertake a public consultation and present the findings to both the NHS England medical directorate senior management team and the Department of Health Non-Medical Prescribing board, to support changes to medicines legislation
- Present the case for change to gain approval for changes to medicines legislation to the Commission on Human Medicines (CHM).

DH: This looks like a lot of work. What happens next?

MON: It is! And there are six more stages in this process. The next stage is to demonstrate

a case of need and for this we will be calling on our members for help.

We need an overview of our profession to give context. This will include: population demographics, professions settings (private, mixed, NHS, special needs, etc) policy, oral health statistics, impact of poor or delayed access to dental services and its strain on healthcare.

An explanation of our profession is required, including statutory regulation, numbers in professions, how we are regulated, education pathway/entry to register, and annotation of further qualifications, etc. We also need to address our professional body's membership, purpose, standards, education, etc. Also the role of the dental hygienist and dental therapist to include any specialist/ advanced practice roles, the workforce of the future - including how exemptions would enhance role and patient care.

We need to look at what we use currently for medicines and give evidence of its strengths and weaknesses plus draft a list of medicines to be used under exemption and categorised.

Then we need to look at patient safety, how to improve safety with medicines, the training needed both postgraduate and undergraduate, indemnity, governance, evidence of our existing safety record and especially any medicine related errors with guidance on how

able to prescribe?

MON: No, I am afraid we are not finished yet. We then go to public consultation - a UK-wide public consultation which is usually 12 weeks in duration - and in preparation for that we must pull together a consultation document.

Again this will involve many agencies including patient and public engagement exercises. There will be another approval process by AHP medicines programme board, DH NMP board, NHS England internal approval process and Ministerial

Once the consultation has been approved and the 12 week period completed then the Commission on Human Medicines (CHM) will assess it. For this presentation of consultation findings and case for change patient safety is paramount.

recommendations will be made to Ministers regarding changes to legislation in line with our proposal. Then we await the Ministerial decision and announcement. There will need to be

Following

this,

concise effort as we can learn from previous projects.

We are fortunate in our profession

that we have many skilled individuals who are happy to help where needed but in order to run the project both societies voted to retain their past presidents to lead. During our terms of office as Presidents of our respective organisations, Fiona Sandom and I were involved at the beginning and our experience in the process and knowledge of the profession will be put to good use. We also have the benefit of orthoptists' experience, who have recently achieved their goal of exemptions, and will be working closely with them.

DH: Ultimately, who will fund this process?

MON: NHS England will fund most of the project except for the professional body's involvement, which is traditionally funded by the professional body. After some discussion BSDHT felt that our society should not be solely responsible for funding this project. The ability to use certain POMs without a prescription will benefit not only our members but all dental hygienists and therapists in the UK plus many employing dentists. For this reason BSDHT and BADT collectively decided to raise some money via the JustGiving site.

NHS England has donated a sum of money. After some rough calculations it was proposed to find at least £50k to employ someone for two days a week for a two year period, plus have some residual for the necessary PR, travel, administration, banking, extras, etc. We know the workload will be more than two days a week from listening to other professional bodies who have gone through this process. If we are fortunate enough to have money left over we will use this to subsidise some education for our members.

WE ARE FORTUNATE IN OUR PROFESSION

THAT WE HAVE MANY SKILLED INDIVIDUALS

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this will be avoided in future.

As this is funded largely by NHS England we need to assess value for money and productivity to demonstrate how exemptions will improve value for money.

To do this we will need evidence and case examples from our members.

This piece of work then goes through an approval process where the AHP Medicines Programme Board, NHS England internal approval process and the Department of Health Non-Medical Prescribing Board assess the case before referring to receive Ministerial approval to commence preparation for a public consultation.

DH: Once you have completed each of these stages are we then changes made to regulations matters for each of the devolved administrations.

The Home Office (Advisory Council on the Misuse of Drugs) then follow a process of implementation and evaluation. They will publish a summary of consultation findings and final versions of supporting documents, raise awareness with key stakeholders, troubleshooting - questions and queries and commission research to evaluate impact of legislative change.

DH: This is obviously a task that will take a great deal of commitment

MON: As you can see it is not an easy process and there are many levels where we may need more time. We do expect this to be a more

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THE ABILITY TO USE CERTAIN POMS WITHOUT A

PRESCRIPTION WILL BENEFIT ALL DENTAL HYGIENISTS AND

THERAPISTS IN THE UK PLUS EMPLOYING DENTISTS'



MON: Your help is essential to a task that will benefit all members of th dental team and, most importantly, our patients! There is lots that you can do:

Please email prescribing@bsdht.org.uk with your experiences of not having a suitable prescription and the impact it had on you, your patient and your practice. Speak to your colleagues, find out if this has affected them and tell us about it. There are no guarantees we will get what we want but we have to fight hard for what we need; please help us work hard to provide evidence for the future of our wonderful profession.

Philips Oral Healthcare will donate £2 to our campaign for every dental hygienist

and therapist who enters their Shine On competition (http://go.nature.com/2w3y96i), or posts on social media (Twitter/Instagram only) using #Shineon, up to a total donation of £10,000. In addition, in every goody bag given away at Shine On events, and through Philips territory business managers, they will include a bespoke postcard explaining their support for the Subscribe to Prescribe campaign and encouraging everyone to enter it or post on social media to increase their donation.

If you are not already a member of your professional body, sign up. The more members we represent, the stronger our case of need.

Visit the BSDHT and BADT websites and keep up to date with our campaign: www.bsdht.org.uk / www.badt.org.uk



Further information

MECHANISMS FOR THE SUPPLY AND ADMINISTRATION OF MEDICINES

There are different mechanisms that can be used for the supply and administration of medicines:

- Patient Specific Directions (PSDs)
- Patient Group Directions (PGDs)
- Exemptions (from the Human Medicines Regulations 2012).

And to prescribe medicines:

- Supplementary prescribing
- Independent prescribing.

We have had the ability to use PSDs (these are written instructions from a prescriber, for medicines to be supplied or administered to a named patient).

Many of us work to a PSD in practice but they need to be 'specific' and have no scope for a patient's changing need. They also do not support autonomous practice. PGDs are a written instruction for the supply or administration of a licensed medicine (or medicines) in an identified clinical situation, where the patient may, or may not, be individually identified before presenting for treatment.

A PGD must be agreed/signed by a dentist and a pharmacist who is suitably experienced in PGDs and each PGD must be approved by the organisation in which it is to be used (hospital, clinic).

Training to use a PGD must be undertaken by anyone working with one. They do have their limitations and one of the major ones for dental practices in the UK is finding a suitable pharmacist to help develop one. They are time consuming to develop and approve, and require review every 1-2 years. In some clinical settings, the number of PGDs required makes the mechanism difficult to implement and impractical to administer.

As a society and in conjunction with BADT, BSDHT decided to pursue Exemptions. This means that we will be exempt from needing a prescription for certain medicines that have yet to be decided on. The decision on the type of drugs will come later in the process and we will need members' input on this also. They will likely include LA, topical anaesthetic, fluoride and other daily POMs that we use in NHS treatments.

An exemption enables the relevant health professional to supply and/or administer the specific medicine listed in the exemption without a prescription. It is applicable to all the workforce where there is an identified need and can be included in undergraduate training over time.

As with any new responsibility there will be a need to update and train in the necessary discipline.



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Stress and well-being in dental hygiene and dental therapy students **CPD**

M. Harris, 1 J. C. Wilson, 2 S. Hughes and D. R. Radford 4 investigate students' motivation to become clinicians and put forward an optimistic view of the role of stress.

questions

Ochampja/iStock/Getty Images Plus

the **free** BDA CPD hub go to **http://bit.** ly/2e3G0sv

Introduction

Research has predominantly used the Dental Environment Stress (DES)1 questionnaire to explore perceived sources of stress in dental undergraduate students.²⁻⁴ However, there are gaps in the literature when it comes to exploring stress among other members of the dental team, for example dental hygiene and dental therapy students (DHDTS), who are educated in a similar environment to dental undergraduate students.5

Most studies exploring dental student stress have equated psychological well-being with the presence or absence of stress, or psychological disorders such as depression.⁶⁻⁸ However, studies have also shown that there are multiple dimensions which contribute to a sense of positive psychological wellbeing. This body of knowledge suggests that positivelyfunctioning individuals establish goals, direction, and purpose, which give them a sense of meaning in life. 9,10

A recent study¹¹ suggested that a stressful life can also be a meaningful life where the stress of pursuing goals feeds a sense of purpose. Linked to this, the study further suggested that individuals often will accept short-term costs, for example pain, anxiety and stress, in order to come out better in the long run. Subsequent research12 further supported this, and concluded that stress should not be seen as a weakness, but as a sign that something you care about is at stake. The literature also states that how the stress is appraised by an individual defines whether it is

perceived as a challenge (enhancing) or a threat (debilitating).12-14

Another recent study¹⁵ used valid and reliable measures of wellbeing^{9,10,16} in conjunction with the widely-used DES to explore stress and well-being in DHDTS. This study showed that DHDTS reported similar levels of stress to that of dental students. However, the DHDTS, unlike the dental students, also reported high scores in the psychological well-being dimensions associated with meaning; more specifically, goals, purpose in life, personal growth, and valued living. 9,10,16 The findings of this research, which provided baseline data on student stress and well-being, provided the stimulus for this qualitative follow-on study.

Valued living is described as the successful consequence of meaningful goal pursuit that is intrinsically reinforced, and serves an individual's core values. 16,17 Using the compass as a metaphor, values have been described as the direction of travel, and goals as the weighpoints that help individuals move in that direction.¹⁷ For example, an individual may have a core value of making a difference to society, and choose a career (goal) as a health care professional, which serves that value. Living a valued life requires the successful balance of aligning our goals and values across all of the different domains of life, so that over- prioritising activities which serves one value is not to the detriment of other personal values (for example, work-life balance).17,18

In the past, stress and well-being in the dental undergraduate programme has primarily been examined using quantitative

¹PhD student, University of Portsmouth Dental Academy; ²Reader in Applied Psychology, University of Portsmouth; ³Associate Dean, Education and Student Affairs, Professor of Clinical and Restorative Dental Sciences, University of California, San Francisco; ⁴Reader Hon Consultant, Integrated Dental Education and Multi-Professional Care, King's College London Dental Institute and the University of Portsmouth Dental Academy

13 BDJ Team www.nature.com/BDJTeam methodology.^{3,4} Furthermore, the literature has revealed little new knowledge in the results and conclusions of studies over the last three decades. 1-4 The need for further enquiry into this field, and the qualitative approach adopted within the current research, which captures students' experiences of stress and well-being from their own perspectives, rather than imposing pre-defined theoretical categories to simulate their experience of the world, is thus indicated. Indeed, a qualitative approach may provide a new opportunity to recognise phenomena (for example, meaning), that has previously been omitted by researchers' reliance on quantitative methodology.

Against this background, the aim of this study was to develop further our shared under-standing of stress and well-being in the dental learning environment. Building on the former body of knowledge and earlier quantitative research, it qualitatively explores these considerations with one student community of DHDTS undertaking their training at the University of Portsmouth Dental Academy (UPDA).

Methods

Ethical approval was gained from the University of Portsmouth Science Faculty Ethics Committee (SFEC 2016-052). Participants were advised verbally and in writing that all information they provided was confidential and that their data would be anonymised. They were given the interview schedule four days before the interview to ensure that consent to participate in a recorded interview was both informed and valid.

A convenience sample of eight DHDTS from UPDA (11% of total student population), who had provided their email address to be contacted for a follow-up interview after completion of an online survey, were recruited to participate in semistructured interviews of approximately 45 minutes duration. The participants were from Years 1 (N = 1), 2 (N = 5), and 3 (N = 2) of the BSc (Hons) in Dental Hygiene and Therapy, to ensure that their experiences reflected the undergraduate programme in its entirety. The interviews were conducted by the first author (MH), who was not actively involved in their education. Seven of the interviews were conducted in a small meeting room at UPDA, which was the preferred venue for the participants. One interview was conducted by telephone. All of the interviews were conducted in July 2016, after the results of the annual examinations. All of the participants were female.

Data collection

An interview schedule designed to explore perceived motivation, goals (in particular, goal failure) and stress in DHDTS, was piloted on two former students, and adapted in light of their feedback. The study participants were firstly asked to talk about their motivation to study dental hygiene and therapy. A second block of questions asked about their perceived causes of stressful experiences within the learning environment (for example, handling goal failure as well as criticism of their work), as identified from previous work and the literature. For example, participants were asked, 'we all fail to get all of our goals sometimes; what do you do if this happens to you?' and 'how do you deal with being observed and having your performance with patients assessed and graded?' The third block of questions was designed to explore the perceptions of stress within the learning environment as enhancing or debilitating.

Analysis

Interview transcriptions were sent to the participants, who were asked to confirm their accuracy before the analysis was carried out. Thematic analysis of the data was undertaken using Braun and Clarke's (2006) six phases of thematic analysis: 1. Familiarising oneself with the data; 2. Generating initial codes; 3. Searching for themes; 4. Reviewing themes; 5. Defining and naming themes; 6. Producing the report. The recorded interviews were manually transcribed as it is 'a key phase of data analysis within interpretative qualitative methodology', and as an approach was

considered an excellent way for the researcher to become immersed within the data.²⁰ Initial codes were generated from across the entire data set and then collated into potential themes. These themes were then reviewed and further defined, and named. Twenty-five percent of the data were analysed independently by the two second authors experienced in qualitative methodology (JCW and DRR), and three themes encompassing 12 sub-themes were identified.

Results

Table 1 shows the three themes and 12 subthemes developed from the data.

Analysis of these themes suggested that the strong sense of passion to become a clinician mitigated most, but not all, of the stressful experiences of the dental learning environment.

In the first theme labelled fulfilment, the participants described their motivation for becoming a DHDT. Within the data the first sub-theme of an unfulfilled past emerged. Here participants expressed an overwhelming desire to feel needed and be trained for a profession which they felt made a difference to people's lives.

Six out of the eight participants had been dental nurses in the past. However, there was a distinct sense of lack of fulfilment, and even frustration at their restricted involvement in patient care in that role. For example, one participant described herself as 'reaching a ceiling' as a dental nurse. Another, reflecting on the lack of utilisation of additional skills that she had hoped would have expanded her

Table 1 The three themes and 12 sub-themes developed from the data					
Themes	Sub-themes				
	a) Unfulfilled past				
Theme 1: Fulfilment	b) Enjoying the present				
	c) Expecting to be helpful and useful in the future				
	a) Learning from peers				
	b) Differing feedback				
	c) Negative feedback a necessity				
Theme 2:The learning environment	d) Examinations as barometer of current capabilities				
	e) Examinations as failed attempts to measure capabilities				
	f) Accepting failure as part of learning				
	g) Rejecting failure				
Theme 3: Perception	a) Negative perception of stress				
of stress	b) Stress as enhancing				

In the second sub-theme, 'enjoying the present', the degree programme itself was a source of fulfilment for all of the participants. The mature students, who had been away from formal education, described the programme as an opportunity to realise they were more academically capable than they had previously given themselves credit for. On the other hand, the younger participants who had progressed directly from A level studies, discussed their sense of fulfilment from the acquisition of life skills that the programme promoted: 'I feel more confident talking to people that I don't know. Like at first, I was a bit nervous - my communication skills weren't as good as what they are now and they've really improved, and that benefits me outside of Uni [sic University] as well' (SS4).

is a career that would adapt around that' (SS3).

In the second theme, labelled 'the learning environment', participants described their experiences of teaching and learning at UPDA. In the first sub-theme, labelled 'learning from peers', participants identified peer learning as a fundamental aspect of their progression through the programme. The majority of participants described how they enjoyed being part of larger peer-learning networks within their cohort, while a small minority relied on one or two significant others. Some participants also described maximising opportunities to learn from others outside of the university while they were undertaking paid work. One participant

more difficult to accept conflicting advice than others, with one participant stating: 'It's very difficult if you have maybe the same patient and two appointments with them, and the first one someone tells you to do something and you get to the second appointment and a different tutor will say something different. It means that you struggle at the start to actually figure which is the right answer and then eventually as time goes on I think you find your own answer' (SS3).

Whereas the majority of participants felt that conflicting opinions reflected the reality of what it will be like in practice: 'In practice, everyone is different and as a clinician, so you're not stagnant just having one person's

'PARTICIPANTS DESCRIBED HOW RESPONSIBILITY,

PATIENT ENGAGEMENT, AND MAKING

A DIFFERENCE WERE KEY TO THEIR

PERCEPTION OF THEIR FUTURE ROLES'

In the third sub-theme of 'expecting to be helpful and useful in the future', participants described how responsibility, patient engagement, and making a difference were key motivators to their perception of their future roles as DHDTS. The majority described their desire to 'help patients more directly' and 'be in the driving seat'. This sense of purpose was particularly strong for one participant who stated: 'Thinking you only get a limited time doing what you're doing and knowing that you have some sort of a contribution to society, someone else's life, it's not just waking up and doing what you're supposed to do' (SS8).

Another participant also valued the flexibility of her future job role in relation to the potential of a good work-family balance: I knew that hygiene and therapy is something that you can do part-time or full-time and often people do work part time in different practices, because as a woman in the future at some point a family is something that I would probably consider and it's quite nice that that it

who was working as an agency dental nurse at weekends, stated: 'Just watching clinicians work and letting them know that I'm on this course. They've been really helpful in showing me things and giving me tips along the way. Just shadowing them and just seeing how they work and how it's kind of natural to them' (SS7).

Participants also identified peer support to be as equally important as peer learning: 'It's quite nice when you do talk to others and they say "yes, it happened to me last week" because you can feel very on your own. It's not until you all sit down and talk to each other that you realise that others feel the same. If you didn't have anyone to speak to, peer wise, you'd go a bit mad, I think. It's nice to be able to talk and realise that you're not alone' (SS2).

In the sub-theme 'differing feedback', all participants discussed the various ways that they learnt from tutors. However, there were mixed opinions in relation to dealing with the differing advice received from the clinical teaching staff. Some participants found it

opinion, you have lots of different opinions which is good' (SS2).

'Everyone has different experiences – everyone has a different job and has trained in different areas. Although there are text-book answers, every clinician has a slightly different take on things. To be a well-rounded learner you need to have different opinions from different people. If you have only one view all of the time, then you don't learn different ways of looking or approaching things' (SS1).

In the third sub-theme, negative feedback was perceived as a necessary evil to learn from and develop. Most interviewees described negative feedback as 'not pleasant' or sometimes 'disappointing', with some participants describing how they 'beat themselves up', but then viewed it as a challenge: 'No-one likes negative feedback, I get quite a bit disappointed, but I think I need that to be able to learn to be able to progress. I beat myself up at first, but come out the other end. I think right, OK, then as a challenge, how

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am I going to make sure this doesn't happen next time? Or how can I change it to be better' (SS2).

'Initially it's not pleasant, but I think you definitely do just get used to it. It's not pleasant, but that is the best way. As a learning experience, if you're not being observed and graded then you're not going to learn or improve' (SS5).

Unsurprisingly, in the fourth sub-theme, 'examinations as barometer of current capabilities', all participants identified successfully passing the programme as their long-term goal. Passing examinations were perceived to be a 'barometer' to show their capabilities to them-selves and others in the establishment: 'I enjoy exams, which is a little bit strange because it's kind of a marker to show what I can do. I feel like you spend all year working really hard, and if it was just tick boxes and didn't have those exams, you wouldn't be able to realise not only your potential, but others wouldn't realise it either' (SS6).

Some of the participants described how examination success in one year 'pushed' them to think about making it better for the next time, as one participant said: 'When I got my marks each year, I would think how can I make that better for next time' (SS1).

Interestingly, the sub-theme, 'examinations as failed attempts to measure capabilities', revealed how a minority of interviewees felt somewhat 'cheated' by the examination process itself. One participant quite bluntly stated: 'I felt like I wasn't showing off my true ability in those exams, because I revised a lot more and did a lot more revision compared to other people who didn't revise all the topics. I felt my revision wasn't reflected in those exams' (SS4).

In the penultimate sub theme, 'accepting failure as part of learning', the majority of participants identified goal failure as something that they accepted as part of being a student. For one participant, goal failure was described as a tool to aid resilience, whereas another described it as a form of self-acceptance: 'I think there's nothing constructive that ever happens from just being negative about something – if you keep trying, what doesn't kill you, makes you stronger, more resilient. If something really doesn't happen, maybe it wasn't meant to be. If you keep saying no in one field, maybe go another path; pave your own way' (SS8).

'I kind of don't expect everything to go perfect; I tend to just deal with things as they happen. When I first started revising I thought OK, I'm going to work as hard as I can, but if I have to retake, I'll have to retake; I didn't think that I'm going to get this first time, it might take

a few goes, but I will get there eventually'(SS7).

'Rejecting failure', which was the final sub-theme, showed how for a minority of participants, goal failure was difficult to accept: 'I don't like it when things go wrong. I don't like to accept it. I want everything to be perfect. At the time, I keep thinking about it, like why did I do that? It's when I go home I realise then OK. Once I go home and realise what's happened – that's when it sinks in and that's when aah, I could have done this, when I didn't' (SS4).

Data for the final theme, labelled 'Perception of stress', emerged from responses by participants when they were asked how they physiologically reacted to stressors within the learning environment (examinations, feedback, and goal failure). Most participants described symptoms such as 'shaky hands', 'sweating', and an overarching worry to 'not let the patient know' that they were anxious.

'It's that feeling in your stomach, it's that scared, horrible feeling and I get it with presentations – right before. They're just temporary things, because of something – you know why you're feeling that and in a way, it's good – you just feel human; they're not a bad thing – it's good to be put under stress for a bit to see how you cope with it' (SS7).

Discussion

The findings of this study suggested that the majority of participants derived a sense of fulfilment from aspects of their undergraduate programme that they perceived as stressful. The participants described a strong sense of purpose, where their current experiences of the undergraduate programme were understood within the context of their ambition to be future clinicians. 11,21,22 Although all the participants described their objective goal as passing the degree programme, many also described a subjective

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In the first of the two sub-themes, 'negative perceptions of stress', the majority of students perceived the physiological symptoms of stress to affect their performance in a negative way: 'I do feel like it did affect me. Whereas if I didn't have those nerves, because I knew what I was doing, it was all in my mind, it just didn't come out that way because I felt nervous' (SS6).

'That initial feeling before you go into an exam, especially a practical exam was just horrible – it's not healthy at all, but I think that once you're in the exam, you kind of relax and everything just flows, but that initial horrible feeling before you go in to an exam, I just think is really unhealthy, and doesn't do anybody any good' (SS2).

In the second sub-theme, 'stress as enhancing', a small minority of students described the physiological symptoms as either enhancing their performance or as a challenge: 'At first I get nervous and then it kind of makes me write quicker – the adrenaline. I don't think it affects my knowledge – it's still in my mind – I've never had a mind blank from being nervous, it's just not a nice feeling' (SS4).

state of fulfilment that undertaking the programme provided. This is consistent with the literature which suggests that it is often the journey to the goal which may be more meaningful than its attainment. What is more, individuals who achieve desirable end states will often form new goals as a means of maintaining a sense of purpose.^{23,24}

Motivation to become a dental hygienist and therapist served the values which the participants reported as around 'wanting to make a difference' and 'being needed'. Moreover, the clinical elements of the programme which involved treating patients as a student, meant that the participants were able to portray current valued living as learners, as well as envisaging a valued life as future clinicians. 21,22 Furthermore, the subjective belief that they could actually make a difference, meant that participants in this study also demonstrated a sense of efficacy, which in addition to self-worth, purpose, and values, is one of the four levels of meaning described by Baumeister and Vohs (2005).21

Self-acceptance of criticism of one's work requires the motivation to endure the stress

of receiving (negative) feedback in exchange for the learning opportunity of receiving it.25 Indeed, participants in this study highlighted aspects of the learning environment that were difficult, negative, and disappointing. However, most participants showed their maturity and discussed how they utilised the feedback as an opportunity to learn and grow, even where there were instances of conflicting opinions from faculty (the clinical teaching staff). Additionally, 'beating themselves up' also highlighted the issue that some participants reported a lack of selfcompassion and found it difficult to take the perspective on their experiences as simply a part of being a student.17 More specifically, these participants tended to set the level of expectation for themselves within the context of that of a qualified clinician, rather than the level of a learner.

new pathways for the same goal.27 Snyder et al. (1991) have also described a 'high-hope' individual as someone whose repertoire of goal pursuit contains learning goals as well as performance goals.^{24,26} However, the majority of participants in this study tended to report goal setting in relation to the more long-term goals of passing the end of year examinations (performance goals). This is not surprising as Western culture puts great emphasis on students getting good grades rather than the process of learning (learning goals). 17 Likewise, the literature suggests that 'competition for grades' is one of the high sources of stress in dental student undergraduate training.3,4

Although stress can and does pose a threat to health and well-being, recent research has suggested that stress can also be enhancing.¹² Studies have shown that subtle differentiations

examinations as a basis for reward and challenge.

A number of the subthemes identified reflected the notion of belongingness. This included 'expecting to be helpful and useful in the future, 'supporting and learning from peers', and 'accepting failure as part of learning'. As well as the literature which has shown the importance of belongingness in relation to the needs for meaning in life,29 belongingness in dental education has been defined as: 'A deeply personal and contextually mediated experience in which a student becomes an essential and respected part of the dental educational environment where all are accepted and equally valued by each other and which allows each individual student to develop autonomy, self-reflection and self-actualisation as a clinician.'30

Indeed, the DHDT students in this study certainly expressed notions of developing autonomy, self-reflection, and selfactualisation as members of the profession.

Most research on dental student stress has focused on the negative aspects of stress.3,4 This has resulted in some researchers advocating a curriculum change to reduce stress in the dental undergraduate programme. 6,31-33 However, stress often results from activities that are meaningful, and reducing stress may result in reducing the meaning of the activity. 11,12,21,22 Indeed, this study has shown that participants' perceived sources of stress in their undergraduate programme were very strongly linked to meaningfulness, therefore we would argue that reducing the sources of stress in the undergraduate programme may also reduce the meaningfulness of the course. Rather than introducing curriculum change, the researchers in this study recommend interventions to raise awareness of the meaningful relationship of stress as a coping mechanism to build resiliency.25

Within the limits of the study, it confirmed the notion found in existing literature which has associated stress in life with meaningfulness. However, while this study has offered some further insights into stress and well-being among DHDTS, some caution is required. The interview data were drawn from a relatively small sample. While it may be argued that this is consistent with qualitative research approaches described within the literature, the generalisability of the findings and conclusions drawn here to other situations and contexts must be determined by the reader.

Conclusion

This study has provided further

THE DHDT STUDENTS IN THIS

STUDY CERTAINLY EXPRESSED NOTIONS OF

DEVELOPING AUTONOMY, SELF-

REFLECTION AND SELF-ACTUALISATION...

Goal attainment is central to Snyder et al.'s (1991) theory of hope.²⁴ Specifically, hope is defined as 'the process of thinking about one's goals, along with the motivation to move towards those goals (agency), and the ways to achieve those goals (pathways)', regardless of the ease or the difficulty of obtaining them.^{26,27} Studies have shown that students can sustain their motivation by utilising goal setting as a challenge for high academic achievement, even under circumstances of stress.26,28 Indeed, a number of participants described how positive emotions from successful attainment of yearly examinations, encouraged them to set 'stretch goals'24 for higher academic achievement for the next year. On the other hand, some participants reported how reflecting on failed goal attempts led them to alter their pathway to goal pursuit. This is in line with the literature that showed that 'high hope' individuals have the ability to 'let go' of problematic goals. Moreover, they expect mistakes to happen, and do not question their innate talent, but rather conclude that in this case, they did not use the best strategy. They will replace failed goals with either new goals completely, or

of mindset can engender meaningful changes in an individual's psychological and physiological state. ^{12,25} More specifically, it has suggested the more an individual adopts a 'stress is enhancing' mind-set, the more likely that stress will have an enhancing effects on their health, performance, and well-being. Conversely, if one views stress as debilitating, the stress is likely to have a deteriorating effect. ²⁵

Most of the participants in this study perceived stress as affecting their performance in a negative way. This is not considered surprising as individuals are typically encouraged to avoid stressful situations whenever possible, or actively control unavoidable or inevitable stress.25 Furthermore, the participants attempts to control unavoidable stress, paradoxically resulted in increased anxiety which they perceived affected their performance, and perpetuated the mindset that stress was debilitating. On the other hand, the minority of participants who described a stress enhancing and enabling mindset, suggested that stress enabled them to write quicker in examinations. This group also described

understanding of stress and well-being in the dental learning environment. It has also provided new insight and a richer understanding of the previous quantitative study, in which DHDTS reported to be positively functioning individuals at the same time as perceiving their training to be highly stressful. ¹⁵ Indeed, as the findings of this study were comparable with the findings of the previous quantitative study of the same student cohort, the authors contend that it has provided further evidence of the meaningful nature of stress in dental hygiene and dental therapy undergraduate education.

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'ALTHOUGH STRESS CAN AND DOES POSE A

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CPD questions

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BDJ Team meets some of the dental care professionals closely involved in Revive Dental Care's dental nurse-led Hard to Reach service in Greater Manchester.

evive Dental Care is an award-winning dental practice in Manchester providing NHS and private dental treatment in Monton, Davyhulme, Urmston and Trafford. In 2013 it began operating a community outreach dental service for homeless and 'hard to reach' patients living in Greater Manchester. Patients are predominantly homeless or from disadvantaged backgrounds and have complex health needs which include substance and alcohol misuse.

The Hard to Reach service works with community drop-in centres used by this population, conducting a general examination and if further treatment is required, referring patients to a weekly clinic in a Revive practice. In 2016 the clinic treated 400 patients from the Hard to Reach service and completed an average of seven cases a week. A dentist delivers the treatments supported by a clinical dental technician (CDT) who makes the dentures required.

In this article we meet dental care professionals (DCPs) Deborah Parker, Faye Greenhalgh and Jennifer Musgrave to find out more about their background in dentistry and their involvement in the Hard to Reach service.

Deborah Parker

Chief Executive Officer

Debbie, 55, qualified as a dental nurse in 1989 but is no longer registered. She is Chief Executive Officer at Revive Dental Care and helped set up the Hard to Reach service with Faye Greenhalgh. Debbie is originally from Hythe in Kent but now lives in Bolton. She is married and can't live without family, coffee and laughter!

How did you start out in dentistry?

It was a total accident! I was looking for a change in direction after working in a microbiology lab and planned to be a nurse for six months whilst I looked around ... 33 years later I am still here!

The patient contact appealed to me - interacting with the patients was always the bit I enjoyed the most.

Back then we only had the National Exam for dental nurses and training sites were not easily accessible. I didn't qualify as a dental nurse until I had been working as one for four years. I studied one evening a week for six months at night school then took the National Exam. Later

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on I did a post qualification certificate in dental radiography.

In 2010 I became practice manager at Revive Dental Care and I am now Chief Executive. I work full time and am based at the headquarters but visit all sites across Manchester, Merseyside and Cheshire.

How did the Hard to Reach service come about?

We were asked by a local GP who runs the homeless medical drop-in if we could support his service and offer dental treatment to his patients. We approached our local NHS Commissioners and they agreed a pilot scheme.

Although my colleagues now run the service, I still play an active role, giving presentations to other Clinical Commissioning Groups (CCGs) and Hard to Reach charities.

When you started the Hard to Reach service, were the people you met

happy to speak to you and talk about their oral health?

People in these groups are often more open and more willing to discuss matters with us than the general population. There are times when we are given information that can be heart rending or shocking to us but which is run of the mill for the patients: random acts of violence against them, being urinated on whilst they sleep, being badly treated by bogus 'landlords' – tales that sometimes beggar belief.

Is it mostly homeless people that are encountered in the service?

Initially it was homeless patients but this has extended to sex workers, refugees, asylum seekers and patients with mental health issues. We visit drop-in centres across Greater Manchester – we actively seek out new venues and our list is growing.

How does it feel to have been involved in setting up this service? What are your future plans?

I am inordinately proud of the work our team do. Seeing a patient complete a course of treatment and becoming pain free and dentally fit is a huge thing. You should never underestimate the importance of a smile.

The Hard to Reach service has been the best and most rewarding service I have ever worked on. I have worked in practice, hospital and a specialist ortho clinic and even done some forensic dentistry, but nothing comes close to the satisfaction and happiness that this service and its users offer us.

I am here for the duration! I intend to see my career out working for Ben Atkins, the Clinical Director of Revive Dental Care.

Faye Greenhalgh

Dental nurse and Project Development Manager

Faye, 28, qualified as a dental nurse in 2007 and has post qualifications in sedation, oral health and fluoride application. Originally from Salford, she lives in Bolton with her partner and two children. The three things she can't live without are her phone, food and her family.

How did you start out in dentistry?

My mum had a lot of dental treatment/ appointments when I was in high school which I attended with her. I was really interested in the job and went on to do my work experience in a dental practice. I didn't want to go to college; I just wanted to become a dental nurse at the time of leaving high school.

I liked that dental nursing was an interactive job and you meet a wide variety of people. I also liked that it was in a clinical setting and I could go on to progress up the ladder: the opportunities are endless.

I started my dental nurse qualification in 2005, going to night school at Manchester dental hospital, and qualified in 2007.

Can you describe a typical working week?

I am currently based at Rocky Lane which is the closest clinic to my home but last year I was based at Ancoats which is one of the furthest away. At Rocky Lane we see families from the local area, mixed NHS/private. At Ancoats it was hard to reach people, who could not hold down a place at a general dental practice due to their chaotic lifestyle.

I work three days a week from 8 am until 5 pm.

I am also the manager of the out of hours service and was the oral surgery sedation nurse previously, but now I mainly manage or attend the drop-in centres.

How did you become involved in the Hard to Reach service and what is your current role?

I returned from maternity leave with my first child and was put on the project. I helped Deb Parker to start the service up. It has been my favourite project to date.

I liaise with the GP homeless service in the building, attend meetings and book patients in. I meet with managers at most of the local homeless centres. I attend the homeless drop-in centres as a team of myself, nurse and dentist and I have also attended these alone to meet with the patients in a non-clinical area.

On a centre drop-in, I inform the manager what dates I will be attending and they will put a poster up informing everyone which day the

FEATURE

dentist will be on site. When we arrive we set up and run a clinic, each patient having a chat with the dentist, and then they will be offered an appointment at the Ancoats practice. They will be given directions, an appointment slip and free toothpaste and toothbrush.

How did it feel to meet people at the drop-in centres for the first time?

At first I was bit nervous as the drop-in centres can get very busy but once I got used to it and realised how much of a difference I was helping to make to the patients' lives it became very satisfying. I think patients from the drop-in find it much easier to speak to you there rather than in a dental practice. They are more open and willing to engage with you.

Can you describe a memorable case of an individual you met at a drop-in centre?

Are you proud of your involvement with the Hard to Reach service? What are your future career plans?

Yes I am quite proud; I wouldn't have stayed so long if I wasn't enjoying it. The Hard to Reach project has been the most enjoyable, year in which I won the highly recommended award for best oral health promoter.

Otherwise I will be spending time with my family.

Jennifer Musgrave Senior Dental Nurse

Jennie, 25, is a Senior Dental Nurse at Revive Dental Care's Ancoats clinic and runs the Hard to Reach service. She completed the Level 3 Diploma in Dental Nursing in 2013.

What first attracted you to working in dentistry and what did you like about working in a dental practice?

I always wanted to help people and just find teeth fascinating. When I first started I really enjoyed learning new things, helping people



DIFFERENCE RECEIVING DENTAL

TREATMENT MAKES TO PEOPLE'S LIVES.'

One patient I met at the drop-in centres only had stumps for teeth and needed a full clearance. She was a sex worker with not much confidence and she came for treatment, had all her treatment completed and a set of dentures made. She was so happy walking out of the surgery with her new teeth. She later came in and told me she had been for a 'proper' job interview and we had given her the confidence to do that.

most challenging and most rewarding project that I have worked on.

I'm undecided about my future plans. I would like to go back into oral surgery and maybe go on to do an implant post qualification.

Do you have any exciting plans this year?

I attended an awards ceremony in May this

and seeing the difference receiving dental treatment makes to people's lives.

I began my dental nursing qualification in 2012 and qualified and became GDC registered in September 2013. I studied with a company called Start Training who came out to the practice to complete coursework and observations.

I am also a trained first aider and am currently preparing to start a fluoride course which I am really looking forward to.

Ancoats Primary Care Centre is about 25

on the other days I work chairside on the inhours service while working closely alongside my manager learning the admin side of the business.

I also work for Revive's out of hours service, where I am on call every Monday night and also work some weekends on a rotational basis. Recently we filmed for BBC Breakfast at one of the drop-in centres. A link to the BBC recording made in June shows the service in action: https://www.youtube.com/watch?v=ujJDhqjJnrs.

I have been to one centre where the police were called due to a fight happening inside. While I was there chairs and tables were being thrown and no one was allowed to leave until the police arrived and the area was safe for everyone using the centre.

As an example of a patient I have encountered at one of the clinics, I once saw a patient who was in quite a lot of pain from broken down teeth. He built up the courage to come and see us at the practice and within four weeks he left smiling with a new set of teeth (dentures). He could not thank us enough for our help; he went on to find the confidence to go for job interviews.

Is it mostly homeless people that are encountered in the service?

'Hard to reach' includes the homeless, sex workers, asylum seekers and drug users. We see a wide range of people who are simply hard to reach and don't have general access to a dental practice. We do go round to centres which can be solely for that group. For example, I go to one which is just for sex workers.

As well as giving out oral health advice on the visits to drop-in centres, we are currently in the process of setting up some education sessions with H3 (an organisation helping the homeless into housing).

Are you enjoying your career at the moment? What are your future plans?

I love what I do and helping towards putting a smile back on a patient's face. It makes me proud to work on the Hard to Reach service and seeing life in a different light.

In the future I hope to become a practice manager.

What do you like to do outside work?

I currently train a group of girls in Morris dancing whilst dancing myself. I have been doing this for over 20 years. I don't have a lot of time for anything else - I work too hard!

Is your dental practice or hospital involved in a special project or exciting new pilot scheme? Why not share your story with BDJ Team readers? Email bdjteam@nature.com.



Left hand page: Far left, Deborah Parker, CEO at Revive Dental Care. Top, Jennifer Musgrave (left) and Faye Greenhalgh who both work on Revive Dental Care's Hard to Reach service. Bottom right, Jennifer Musgrave (right) with a patient who is featured in the BBC Breakfast video. Centre, Jennifer Musgrave who runs the Hard to Reach service

Above, Ben Atkins, the Clinical Director of Revive Dental Care (left) being filmed with a patient for BBC Breakfast

minutes from my home in Salford. We see a wide range of patients with a mix of NHS and private treatment as we are quite close to the city centre and businesses so not all our patients are from the Ancoats area. On a Wednesday we solely see hard to reach patients.

Can you describe a typical working week?

I work 8.30 am to 5 pm Monday to Friday: on Wednesday I am chairside on the Hard to Reach service clinic (11 am to 3 pm); on Thursdays I go out to the drop-in centres to see patients and give oral hygiene advice; and

How did you become involved in the Hard to Reach service?

It was established as I was going through my dental nursing qualification. I was working at another site so used to come over to nurse and the opportunity came along to cover the manager of the service while she went on maternity leave and I jumped at the chance.

On Thursdays I go to around ten different community drop-in centres on a rotational basis on my own.

What happens on the drop-in centre visits?

I give out oral health advice, toothbrushes, toothpaste and mouthwash. I try and encourage patients to register with the dentist to have a full examination and see to any dental needs they have.

When I first started going to the drop-in centres I didn't know what to expect. I didn't know how people would react to me coming in or if they would even consider registering. As time went on and I continued going to the centres people were more than happy to come and speak to me, not always about dental treatment, sometimes just about what they did that day.

Dental hygiene services in a mixed practice



Is your dental practice misleading patients about offering dental hygienist services under private contract? By Len D'Cruz¹

NHS dentistry

The NHS dental contract is designed primarily to provide the necessary treatment to secure a patient's oral health. Whilst the contract takes different forms in England and Wales with UDAs being the metric of choice and Scotland and Northern Ireland retaining a fee per item remuneration model, the delivery of care is predicated on need rather than want.

Many practices have built success on 'mixed practices, that is, the delivery of private care alongside NHS dental care to individual patients.

Mixing rules

The rules around mixing in England and Wales are quite clear. A dentist may, with the consent of the patient, provide privately any part of a course of treatment (except sedation and general anaesthesia) but shall not, with a view to obtaining the agreement of a patient to undergo services privately:

- Advise a patient that the services which are necessary in their case are not available from the contractor under the contract
- Seek to mislead the patient about the quality of the services available under the contract.1

The General Dental Council (GDC) also make it a professional and ethical requirement not to mislead patients about the availability of treatment² and warn about not pressurising patients to accept private treatment that could be available on the NHS:

- 1.7 You must put patients' interests before your own or those of any colleague, business or organisation
- 1.7.3 You must not mislead patients into believing that treatments which are available on the NHS (or equivalent health service) can only be provided privately. If you work in a purely private practice, you should make sure that patients know this before they attend for treatment

1.7.4 If you work in a mixed practice, you must not pressurise patients into having private treatment if it is available to them under the NHS (or equivalent health service) and they would prefer to have it under the NHS (or equivalent health service).

Delivery of periodontal care by dental hygienists

From their training and experience and under their scope of practice, dental hygienists are the ideal members of the dental team to deliver periodontal care. However, the business model operated by dental practice owners makes the provision of this service difficult to operate under the NHS since the hourly rate many dental hygienists command make it difficult to offer their services on the NHS. This is because most dental hygienists would like sufficient time to spend delivering their oral health messages, monitoring patient compliance and carrying out treatment. This is often a 30 minute appointment in which they have to carry out a range of hygiene services as well as infection control procedures before and after patients, unless they have the luxury of a

is difficult

practices to fund a dental hygienist on the NHS, which is why the service is inevitably delivered under private contract. And that is where the problems start, especially when practice owners want the hygienists to be busy and for the service to be cost effective.



¹Dento Legal Adviser, Dental Protection

Associates are sometimes 'incentivised' to make the referrals by a small referral fee for each patient referred for treatment – fees of anything between £3 and £15 per patient. Whilst this might on the face of it appear a reasonable encouragement to associates to make a referral, the GDC has some concerns about the perceived ethics of this:

1.7.6 When you are referring patients to another member of the dental team, you must make sure that the referral is made in the patients' best interests rather than for your own, or another team member's, financial gain or benefit.

The same applies to incentives or referrals by other practitioners for implants, perio referrals, etc, either internally or from local practices. Vouchers, bottles of wine or cakes count as 'benefit' for the purposes of referrals.

More problematic is when the referral to the dental hygienist is for treatment under private contract when they are NHS patients.

Typical scenario

The typical scenario is a patient is seen under the NHS for a check-up. A basic periodontal examination (BPE) is done and scores of 2s and 3s are noted. The patient is told about their gum problems and advised to see the dental hygienist. The patient accepts the recommendation of the dentist and makes the appointment. That's all fine until they ask at reception if they could see the hygienist on the NHS.

'No' they are told; the hygienist only works on a private basis.

That is of course factually correct if that is what happens at that particular

practice

but the patient has not been told that, as an NHS patient, they are entitled to have the treatment they need under the NHS and the hygienist is simply an alternative option they can choose to have. In England and Wales the patient is not registered as they are in Scotland but they are still deemed to be an NHS patient if they have had an NHS examination.

At best, the patient has been misinformed about their options; at its worst the dentist has been deliberately misleading or dishonest.

Professionalism and ethics

Now we are in the territory of professionalism and ethics and the GDC. It can be reasonably argued that the patient has not given their consent for the hygienist treatment as they were not made aware of the alternatives. Confusingly for patients, fees to see the dental hygienist can be similar to NHS periodontal treatment charges so they might not always be alerted to the fact they are not being seen on the NHS.

Implicated in this, along with the dentist who may be an associate or Foundation dentist, is potentially the practice owner who may be said to either exert control over the working practice of the associate be incentivising the dentist with financial inducements to make the referrals.

How is it that dentists find themselves at odds with professional guidance in this matter? When asked by patients why they should see the hygienist for the gum treatment they need they are sometimes offered reasons such as 'they can spend more time with you', 'they can tailor the treatment to your particular needs', 'they specialise in this and do it all the time', 'they are better than dentists and they can do a better job than I can' and so on.

The reality is that none of these reasons really stand up to even the most perfunctory of challenges.

Dental hygienists do provide an excellent service to patients and can be a real practice builder, supporting dentists in delivering high quality care on the solid foundations of healthy

periodontal tissues.

gum condition.

When patients are made aware of their gum problems, via its manifestations of bleeding gums, bad breath and recession for example, and they own their condition and the consequences with a process of co-diagnosis, patients will readily take up offers to solve their problems once they understand the benefits. It is very much a matter of shared decision making³ that

engenders this trust between clinician and patients so that the patient can make an informed choice about what is the best form of treatment that effectively manages their

The solution to this apparent impasse is that NHS patients should be making a deliberate choice to see the hygienist under private contract having been told by the treating dentist that the treatment they need is also available on the NHS at the practice. To ensure there is no confusion, the offer of NHS and private hygiene treatment should be recorded in the notes and where the patient agrees to any form of care, an FP17DC estimate form should be completed.

Information leaflets explaining the options patients have are also useful to demonstrate the transparent discussion that takes place.

Dental practices have also developed alternative business models where their hygienist service is provided under the NHS. In this case periodontal pathways4 can be usefully established within the practice to determine the precise criteria for referral to the hygienist for periodontal treatment which would attract UDAs under Band 25 or periodontal fees in an item of service that operates in Scotland and Northern Ireland in accordance with the Statement of Dental Remuneration (SDR). Whilst there are no stipulations about the number of visits or time intervals between appointments for periodontal treatment in England and Wales, there are in Scotland and Northern Ireland.

In the end, many patients accept the advice and recommendations they are offered by the dentist and as long as there is no coercion, subterfuge or deception, practices and their teams should be safe to offer hygienist services under private contract without fear of breaching NHS regulations or ethical and professional guidelines.

- National Health Service (General Dental Services Contracts) Regulations 2005 Sched 3 Part 2 Para 10.
- 2. General Dental Council. *Standards for the dental team*. 2013, para 1.7.3.
- 3. Ryan F, Cunningham S. Shared decision making in healthcare. *Faculty Dent J* 2014; **3:** 124-126.
- 4. Providing Periodontal Care on the NHS in England and Wales. 24 September 2016.

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- 5. National Health Service (Dental Charges Regulations) 2005 Sched 2.

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t is the question.



Exploring alternative methods

of gag reflex control

Part 2: Acupuncture

By L. Cox¹ and J. Brindley²

This article is the second of two covering the management of patients with a sensitive gag reflex. Part 2 will focus on the technique of acupuncture - a traditional Chinese therapy.

A sensitive gag reflex can be difficult and problematic for registrants to manage as it can contribute to patient distress and anxiety and disrupt or prevent delivery of dental care, and therefore impact on future care. The aim of this article is to raise awareness of the contributing factors, severity and management of over active gag reflexes.

What is gagging?

The terms gagging and retching are used synonymously to describe similar physiological occurrences. However, these terms have different meanings: retching is the initial process of expelling substances from the stomach, whereas gagging stops unwanted entry into the mouth or oropharynx.1 Gagging is a normal reaction and protective reflex to stimulus such as dental instruments and clinician fingers within the oral cavity. Gagging can be absent, reduced or pronounced in the dental environment.1 Clinicians can look for oral signs in patients to help anticipate gagging; these signs include palatal or circumoral muscle spasm, pharyngeal spasms, vomiting and excessive salivation.2 Others signs which may indicate a patient is struggling with a gag reflex are panic attack, lacrimation, sweating, fainting and uncoordinated or reversed peristalsis.2

The gag reflex is most commonly triggered by five areas in the oral cavity which are considered very sensitive; these areas are the fauces, base of the tongue, palate, uvula and posterior pharyngeal wall.3 Occasionally gagging can be inadvertently caused by clinicians and iatrogenic factors such as over loaded impression trays and aspiration.2 Dental staff may also recognise that patients sometimes start gagging with even auditory, olfactory or psychic stimuli.4

Almost half of dental patients report gagging at least once during dental visits and 7.5% report always gagging.5 Whilst these numbers may not seem significant, there can be detrimental

¹ Laura Cox BSc(Hons), RDH, RDT. Laura qualified as a dental hygienist and therapist from the University of Portsmouth Dental Academy in 2016. Prior to this Laura had several years of dental nurse experience in general practice, where she worked alongside a dentist who provided acupuncture. It was the outstanding results that Laura witnessed during her time in practice that sparked her interest in alternative therapies, which was the focus of her final year undergraduate research project. Joanne Brindley supervised Laura in her undergraduate research study and has supported Laura in the production of this article. Laura is currently working as a dental therapist on the Oxford Deanery Scheme. In the future Laura hopes to secure a therapist position within the NHS or Civil Services

²Joanne Brindley MA, SFHEA, PgCLTHE, RDH, RDT. Joanne is a Senior Dental Care Professional Teaching Fellow at the University of Portsmouth

consequences for patients with a pronounced gag reflex as well as for the dental team. Patients who suffer with gagging are more likely to be anxious of dental visits, fear dental pain and have negative opinions of dental professionals.5 Patients may anticipate gagging or become distressed at the thought of dental care, thus resulting in dental avoidance, pain and neglected dentition.2

How can we assess gagging?

Several researchers have developed ways in which to classify and assess gagging severity; the most prominently used indices are the Gagging Severity Index (GSI) and the Gagging Prevention Index (GPI), developed by Dickinson and Fiske.1 Both of these scales use five descriptions to assess gagging, with one being a normal gag reflex and five being severe gagging that cannot be controlled. Although other systems and scales have been put into place the GSI and GPI have been used several times over and by several researchers demonstrating their replicability.

Why is this relevant?

Recent developments in dentistry and healthcare suggest that as a profession we are starting to accept a more holistic, patient centred and multidisciplinary approach to patient care and that the training for dentists and dental care professionals (DCPs) is now encompassing alternative therapies within training.6 The GDC's Preparing for practice document includes several learning outcomes which reinforce this:7

- Assess patients' levels of anxiety, experience and expectations in respect of dental care which reinforces the role of DCPs in assessing and managing patients
- Describe the properties of relevant medicines and therapeutic agents and discuss their application to patient management
- Describe the range of orthodox complementary and alternative therapies that may impact on patient management.

Anxiety and gagging have been found to be closely linked so to ensure patient comfort and compliance it is important to consider the ways in which registrants can help relieve anxiety and prevent disruption to the delivery of care.8 Historically gagging has been managed by desensitisation, relaxation, distraction and various anaesthetic and sedation techniques.9 Chinese medicine is not something traditionally used within dentistry, however, its use and value has been observed in relation to not only gagging but anxiety, xerostomia and relief of temporomandibular joint dysfunction and is therefore considered a complementary therapy.10

What is acupuncture?

It is believed that energy known as ch'i runs through 14 various pathways in the body and that 361 acupoints can rebalance Yin and Yang.11 Yin and Yang are a balance which define health and are complementary representations of dynamic equilibrium: Yin provides qualities such as tranquillity and rest whereas Yang is responsible for activation and transformation.13 If applying this theory to heightened gag reflexes it is reasonable to presume that Yin is insufficient thus making the patient gag, yet stimulation to acupoints will restore balance, consequently relieving gagging. Therapeutic application to acupoints has evolved to encompass needling, pressure and massage amongst others.12 Acupuncture can be defined as the insertion of a solid needle into specific body parts for therapy and health maintenance.13 Acupressure, alternatively, is a variation of acupuncture involving constant pressure on acupoints without puncture of the skin.3 The acupoints of interest for the relief of gag reflex are outlined in Table 1.

What is the evidence that these acupoints are effective?

Cheng jiang

One of the most commonly investigated points is cheng jiang, also known as CV-24, which is located in the labio-mental fold. A blinded, randomised, controlled study (RCT) on transesophageal echocardiography (TEE) patients has demonstrated the efficacy of this point. TEE reportedly causes nausea or gagging in approximately 60% of people. Participants underwent this procedure with either acupuncture, sham acupuncture or no acupuncture. Statistical analysis demonstrated significant differences, with the acupuncture group experiencing considerably less gagging than the sham group (p = 0.037), and even less so than the non-acupuncture group (p =0.013).13 Similarly an audit of dental patients found that acupuncture to CV-24 enhanced tolerance to treatment with an average mean improvement of 53% (p < 0.0001) between GSI and GPI scores. Although no controls were implemented in this study, the methodology was robust and all participants underwent the same dental treatment of three stage maxillary impressions. The GSI and GPI were recorded prior to and after treatment respectively by statistical analysis which demonstrated success in 81% of participants.9

Furthermore, a similar method was applied in a controlled trial where the GSI scores were recorded for orthodontic patients. However, rather than puncture skin, laser stimulation of point CV-24 was implemented to ensure comfort. The test group exhibited an improvement of 37.9% (p = 0.002) between GSI and GPI scores, with 86.6% of participants able to endure impressions.14 Both earlier and subsequent review papers discuss the success of CV-24 in reducing gagging, strengthening its value.15-18

Nei guan

Point P-6 is located on the wrist. Statistical analysis has demonstrated that acupuncture to this point significantly decreased gagging compared to sham acupuncture to the same point.^{11,19} In a randomised double-blind study acupuncture to P-6 improved visual analogue scores (VAS) by 48% (p = 0.0015) in addition to improving GSI and GPI scores by 32% (p =0.0016).20 Similar results have been established by other researchers, acupuncture to P-6 exhibited an average mean score of 0.92 (p <0.001) compared to pseudo-acupuncture to the same point which showed a mean score of 1.37 (p = 0.157). Acupuncture was therefore significantly more successful than sham or pseudo interventions.

Additionally, P-6 has been investigated by implementing test and control groups on P-6 itself and a dummy site located close to the acupoint.3 Substantial differences in acupuncture at P-6 compared to a dummy site were discovered. The clinicians evaluated acupuncture and found a statistical difference (p = 0.047) between P-6 and a dummy site. Patient evaluation also showed differences between the sites for acupuncture (p = 0.009).³

Ear acupuncture is a variation of acupuncture whereby most ailments can be remedied via the ear rather than acupoints on the body.20 Er men or TB-21 is located just above the tragus of the ear and has been evidenced to be an effective acupoint.8,10

A case study over 25 treatment episodes demonstrated that acupuncture to TB-21 relieved gagging and demonstrated high success rates on patients receiving a variety of dental treatments. Four of the subjects had GSI scores of IV and six of V; this however improved to GPI scores of I for eight and II for the remaining two subjects.10 Although these results are promising, the lack of control group and small participant number indicates that additional research on TB-21 incorporating statistical analysis would further reinforce these findings. A much larger randomised controlled trial of 100 participants offered encouraging results, participants receiving acupuncture to TB-21 showed a mean score of 0.65 (p < 0.001) after treatment compared to the control group who had a sham acupuncture mean score of 1.37 (p = 0.157).¹¹

Table 1 Glossary of Acupoints						
Name	Point	Location and Diagram	Source			
Cheng jiang	CV-24	Labio-mental fold	Rosted <i>et el.</i> , 2006°			
Er men	TB-21	Above tragus anti-gagging point external auditory meatus →	Fiske & Dickinson, 2001 ²¹			
Hegu	LI-4	Dorsum of hand, between first and second metacarpal bones Hegu (LI-4)	Vachiramon & Wang, 2003 ¹⁸			
Lao gong	P-8 / PC-8	Centre of ventrum of hand, between second and third metacarpal bones Lao Gong Per. 8	Acupuncture.com, 2015; http://bit.ly/2slOVw ¹			
Nei guan / Nei kuan	P-6 / PC-6	Ventral surface of wrist, 2 inches above crease of wrist	Lu <i>et al.,</i> 2000³			

Using needles in ear sites has the advantage of lying out of the area of work and could be valuable in addition to other acupoints for very severe gagging.¹⁰ Acupuncture to point TB-21 is an effective and non-invasive technique to control gagging. 16,21

Synergy

The success of CV-24 and P-6 used together has been documented in the relief of gagging. 14,22 Acupressure to P-6 has been investigated alongside laser stimulation to CV-24. Together these points achieved a difference of 58.9% (p = 0.001) between GSI and GPI scores with 93.3% of patients able to tolerate impressions. There was more success with CV-24 and P-6 combined compared to CV-24 alone evidencing a synergistic effect.14

Furthermore, successful acupuncture to points TB-21 and P-6 has been demonstrated on patients undergoing upper and lower impressions. Statistical analysis revealed a significant reduction (p < 0.05) in gagging scores for each impression procedure.²² This is indicative of a synergistic effect between different acupoints.

Visual comparison

The reviewed studies utilised diverse methodologies and analysed their findings differently. In order to quantify and illustrate the results and generate direct comparisons of the acupoints and interventions (acupuncture, laser, and acupressure), graphs were created depending on the type of analysis and scoring systems adopted. Figure 1 represents the most effective therapy independently as acupuncture to CV-24, although there is a clear success for combined therapies to CV-24 and P-6 simultaneously which suggests synergy.

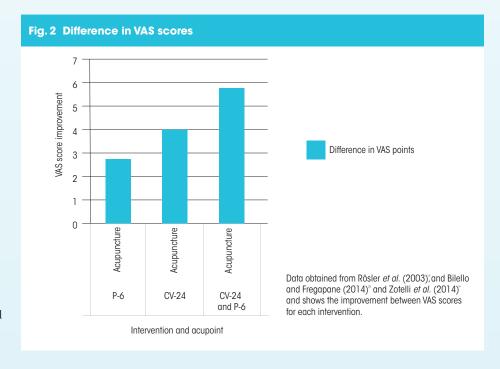
Figure 2 demonstrates the differences in visual analogue scores and the efficacy of acupuncture to CV-24 compared to acupuncture to P-6 and shows evidence of a synergy between these acupoints when acupuncture is implemented.

Some of the studies have their own methods of measuring gagging which have not been repeated, thus preventing direct comparisons. These results have been collated independently to represent their efficacy; Figure 3 shows that acupuncture to TB-21 was more effective than to P-6, which had gag scores dropping significantly after acupuncture.

Acceptance and efficiency

Acupuncture is well tolerated by most patients¹³ although it is considered invasive by some, particularly children or needle phobic patients.14 The sensation of acupuncture is similar to being pricked with a toothpick which whilst uncomfortable may be favourable compared

Fig. 1 Differences in percentages between GSI and GPI scores 70 60 50 Percentage 40 Difference between GSI and GPI score 30 20 10 0 Acupuncture acupuncture and acupressure Acupuncture Acupuncture Data obtained from Rosted et al. (2006) and Sari and Sari (2010) and shows the improvement between CV-24 CV-24 CV-24 P-6 GSI and GPI scores following and P-6 intervention. Intervention and acupoint



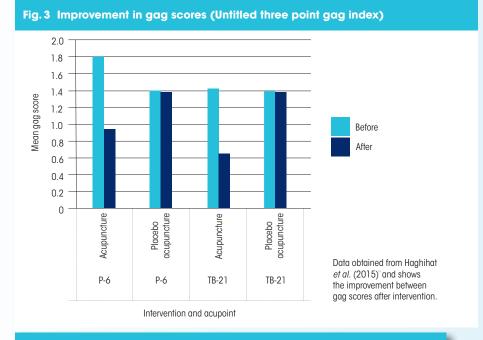
to a hypersensitive gag reflex.²² Acupuncture has been described as quick (2-3 minutes of appointment time), non-invasive, safe and cost effective with a material price of £0.20 per patient per visit.21

How can we develop and access these skills?

In order to practise acupuncture it is essential to attend appropriate training and gain a formal qualification. The GDC state in their Scope of practice document that 'The scope of your practice is a way of describing what you are trained and competent to do. It describes the areas in which you have the knowledge, skills and experience to practise safely and effectively in the best interests of patients.²³ This reiterates

the importance of being skilled and competent and the responsibility registrants have in acting in the best interests of their patients. On further communication with the GDC and several indemnity providers it was advised that there must be a clear prescription for the patient for acupuncture; it is also beneficial for at least one referring dentist to also be qualified in acupuncture and that registrants with additional skills should be competent and suitably indemnified. This is a great opportunity for team building, joint continuing professional development and practice building.

Information on courses for dental acupuncture as well as other additional complementary therapies can be found with local deaneries and on the following websites:



'BY GAINING SKILLS AND QUALIFICATIONS IN

THIS AREA YOU CAN SUPPORT YOUR PATIENTS

TO IDENTIFY THEIR OWN TRIGGER POINTS'

- http://www.dental-acupuncture.org/coursesfor-professionals/
- http://www.cmcdentalcpd.co.uk/Courses. html
- http://www.medical-acupuncture.co.uk/ Default.aspx?tabid=313.

By improving knowledge and gaining skills and qualifications in this area you can support your patients to identify their own trigger points, improve the patient experience by consciously avoiding areas that elicit gagging and provide treatment which can potentially reduce or even eliminate gagging and its associated issues. The use of alternative therapies within a healthcare setting is growing in popularity but is an area that should be further explored to promote its efficacy and use. Incorporating these techniques into personal daily practice can be an invaluable tool.

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Product news

Product news is provided as a service to readers using text and images from the manufacturer, supplier or distributor and does not imply endorsement by BDJ Team. Normal and prudent research should be exercised before purchase or use of any product mentioned.

AWARD WINNING BABY TOOTHBRUSH

Curaprox has won the Best Baby or Kids' Toothbrush category at The Beauty Shortlist Mama & Baby Awards 2017. Curaprox's Easy Baby biofunctional toothbrush was developed by dental science specialist Professor Adrian Lussi for use in children of up to four-years-old. One of its many features is the compact, soft rubberised head, which ensures that parents can reach all areas of their child's mouth both effectively and safely, without the danger of inflicting injury to the oral mucosa. The toothbrush has the added benefit of a rounded handle to encourage children at the upper end of the suggested age scale to hold and use

suggested age scale to hold and use the toothbrush correctly, as well as prevent excessive pressure being applied.

In addition, the Easy Baby biofunctional toothbrush employs the use of Curaprox's famous CUREN bristles, which are incredibly fine and gentle on the mouth.

There are a number of other

products available within the Curaprox Baby range, all of which have been created in collaboration with orthodontists and specialists to give infants and young children the best possible start in maintaining their oral health. The CURAbaby teething ring, for instance, is available in both pink and blue for infants 0-24 months, and is perfect for reducing pain in teething babies, not to mention ideal for preparing babies for their first toothbrush. Then there's the Curaprox soother, designed to prevent malocclusion and the development of an abnormally high arch through the use of side wings

and a flat tip. There are three sizes available: size 0 for 0-7 months, size 1 for 7-18 months and size 2 for 18-36 months.

If you'd like to offer your patients the award winning Easy Baby toothbrush or one of the other products available, get in touch with Curaprox today. Call 01480 862084 or visit www. curaprox.co.uk.

ORTHODONTIC AND BRACE CARE

The common denominator of second teeth and the hormonal changes of adolescence

is the depletion of hyaluronic acid, the normal constituent of healthy periodontal tissues. The consequence of this is a reduction in the level of protection given to the mucous membranes of the oral cavity. Gengigel Gel Teen has been formulated to adhere to the mucosa, allowing high molecular weight hyaluronan to penetrate the gums below and

restore a healthy balance.

Gengigel is also ideal for children wearing

braces, who are more susceptible to gum inflammation, ulcers and lesions caused by rubbing of the appliance. The gel is designed to be massaged gently onto affected areas where it is clinically proven to alleviate pain and rapidly repair damaged gums.

For more information call 0208 459 7550 or email marketing@dentocare.co.uk.

NEW EMERGENCY EYEWASH STATION

TAUB Products, a long-time manufacturer of dental laboratory and restorative products, has introduced a low-profile emergency eyewash station that adapts to a wide range of office and laboratory faucets. The new station provides instant access to a single aerated water jet, flushing the eyes and washing the face of chemical or particulate contamination.

The unique design allows water to flow normally downward for washing hands, and during an emergency, the user can quickly rotate it upwards, providing a soft stream of water that will wash the face. The user places the water stream on the brow of the nose and both eyes receive an effective rinse.

Setting this apart from dual-jet designs, the key features of the product include a single rotating nozzle to wash eyes and face, a low-profile modern design that fits most standard faucets, a flow rate of 1.2 gallons per minute, which exceeds ANSI standards, and a design that prevents standing water, thus reducing the chance for mould development.

TAUB Products is celebrating its 65th year in business. TAUB provides innovative, high-quality solutions for dental professionals. For more information on TAUB and its products go to www.taubdental.com.



If you would like to promote your products or services direct to the dental industry in *BDJ Team*, call Andy May on 020 7843 4785 or email a.may@nature.com.

AN INSTANT BURST OF MINTY FRESHNESS

Although the human sense of smell is acute, it is difficult for patients to smell their own breath. Therefore, the fear of unpleasant smelling breath remains one of life's most sensitive and significant concerns.

But now your patients can enjoy the reassurance of pleasant breath with CB12.

Unlike some mouth rinses, CB12 mouthwash does not just mask oral

> malodour temporarily. It has a unique patented formula, specifically developed to target and neutralise odorous volatile sulphur compounds (VSCs) with long lasting effects. CB12 mouthwash is clinically

proven to neutralise breath for 12 hours after just one rinse.

Rinsing with CB12 mouthwash also helps to enhance your patients' oral hygiene levels. It contains fluoride to strengthen the teeth and prevent cavities as well as highly effective antiplaque agents.

As well as this highly effective mouthwash, there is also the handy CB12 Mouth Spray for an instant burst of minty freshness. It's the perfect supplement to CB12 mouthwash and provides patients with additional confidence wherever they go.

The unique design also boasts an ultra-

reflective surface with a superior smooth

multi-layered coating that is repellent to

grease and contamination - this provides

For more information about CB12 and how it could benefit your patients, visit www.cb12.co.uk.

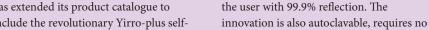
PRESERVING THE LIFE OF YOUR UNIT

Dürr Dental invented the modern day suction system so have a wealth of experience to draw on when it comes to maintenance. To preserve the life of your unit they offer the following tips (based on over 50 years of experience):

- 1. Aspirate at least one glass of water through the spittoon and the suction hose after every patient to remove blood, saliva and dentine residue
- 2. Use cold water to mix disinfectant as hot water inactivates many disinfectant components and tends to create foam and cause coagulation when combined with blood
- 3. Just as with household appliances, limescale can damage components. Depending on water hardness, use MD555 cleaner at least once a week
- 4. Use only foam-free products intended for the job - never use household cleaning agents in the suction unit
- 5. Never mix products as this can neutralise the disinfectants
- 6. Do not use the suction unit to vacuum drawers!
- 7. Carry out the recommended maintenance.

Dürr Dental are the only supplier of suction systems who also manufacturer cleaning solution. Their Orotol range is the leading brand of suction disinfectant in the world. It boasts an extraordinary cleaning power and is foam-free making it popular with dental nurses. The suction range is available as either a concentrated powder or as a liquid, both of which have an environmentally friendly composition and a pleasant odour.

For more information call 01536 526740.



maintenance and has an ergonomic grip. To find out more about the Yirro-plus

> or other products in the portfolio, contact Nuview on 01453 872266, email info@ nuview-ltd.com or visit



REVOLUTIONARY SELF-CLEARING MIRROR

Nuview is renowned for its range of quality Carl Zeiss dental magnification and illumination systems.

Now, the experienced distributor has extended its product catalogue to include the revolutionary Yirro-plus selfclearing dental mirror - a system that uses controllable airflow to provide the user with nonstop clear sight.

The Yirro-plus can be integrated into most dental chair units by means of universal adapter or mounted directly into a spare slot for ease of use.

EVERYTHING YOU NEED IN VIBRANT COLOURS

Whether you're looking to simply inject a little personality into your practice, or you're striving to strengthen your brand, the Vibrenté range of dental consumables are the perfect option.

Available exclusively from Dental Express (a trading division of Surgery Express LLP), the range of bibs, aspirator tips, gloves, masks and more come in a wide range of vibrant, eye-catching colours.

Manufactured to the very highest standards, the range of Vibrenté products includes everything a dental practice needs to provide excellent, personalised service.

If you want your dental practice to stand out from the crowd, consider the Vibrenté range. Contact the expert team from Dental Express to find out more. Visit www.dental-express.co.uk, call 0800 707 6212 or email web@dental-express.co.uk.





BDJ Team CPD

CPD questions: September 2017

CPD: ONE HOUR

Stress and well-being in dental hygiene and dental therapy students

- DHDTS' perceived sources of stress during their undergraduate programme were strongly linked to a sense of meaningfulness. What are the four levels of meaning, as described by Baumeister and Vohs (2005)?
- A) autonomy, self-worth, pity, and values
- B) efficacy, autonomy, purpose, and pity
- C) efficacy, self-worth, purpose, and values
- D) self-worth, autonomy, purpose, and pity
- 2. For the participants in this study, what was perceived to be a 'barometer' to show their capabilities to themselves and others in the establishment?
- A) receiving positive feedback
- B) being able to cope under stressful situations
- C) perceiving stress as enhancing
- D) passing examinations

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- In describing a sense of developing autonomy, self-reflection, and self-actualisation as members of the profession, the DHDTS in this study expressed the notion of:
- A) belongingness
- B) resilience
- C) purposefulness
- D) self-esteem
- 4. Drawing on findings from this study, what was the author's recommendation?
- provide interventions to raise awareness of the meaningful relationship of stress as a coping mechanism to build resiliency
- B) reduce the sources of stress within the undergraduate programme
- C) introduce stress avoidance workshops within the undergraduate programme
- carry out stress resilience testing on candidates who apply for DHDT undergraduate training





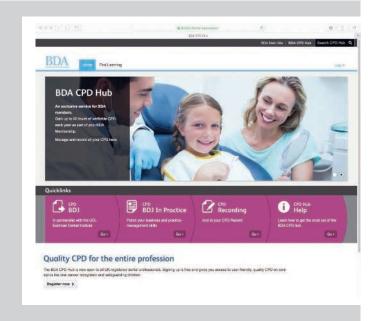
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BDJ Team CPD is now on the BDA CPD hub! This site is user-friendly and easy to use. There are currently ten hours of **free** BDJ Team CPD on the CPD Hub from 2016 and eight hours from 2017!

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To send feedback, email **bdjteam@nature.com**.



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