It’s hard to believe that as you read this our Oral Health Conference for 2013 is now a distant memory; Christmas has come and gone and we are all sheltering indoors from the winter weather, feeling guilty after the excesses of the festive period. January is traditionally a good time to look forward and make plans for the year ahead and I shall be looking carefully at what I have to do in my last year as your President!

The conference requires such a lot of organisation - it’s like painting the Forth Bridge, as soon as it’s finished, it’s time to start again! But with the return to the fabulous venue in Liverpool this year’s conference will be bigger and better than ever. One thing’s for sure though – we’ll certainly be looking to book the Mersey Beatles again for the President’s Reception!

Birmingham proved to be a great location for the 2013 conference and all credit to Michaela and her team for putting together such an impressive programme, full of variety and enjoyed by all. I’m sure that before she takes over as President at this year’s conference she’ll again come up trumps with the programme for Liverpool.

New Beginnings – New Team
We have some new faces in the Executive Team following some changes at this year’s AGAM and joining us are:-

Helen Westley - Honorary Treasurer;
Julie Deverick - Honorary Secretary;

The Council meeting in February will see the first meeting of our newly elected Council – made up of Tutor’s Rep, Publications’ Rep, Regional Group Council Representatives as well as the newly elected members to Council - Diane Rochford and Alison Lowe. Also at this meeting, the Council will be able to elect two members from their peer group to the Executive Team for one year - so if you want to get more involved with your Society, now’s the time to start thinking about the elections which will take place later this year.

In this edition of Dental Health, you’ll have noticed that there’s a survey for you to complete - this is extremely important to us as we need to find out what YOU want from your Society and its regional group meetings. Whilst many of you religiously attend every meeting in your region, there are many more of you that never attend, and we’d like to know why that is - what are your likes and dislikes about regional meetings? So, through this survey, we’re looking for you to be open and honest in giving us your constructive criticism. Maybe we don’t need regional group meetings anymore - or maybe we just need some fresh thinking about how they run in the future - please give us your ideas and feedback!

Ongoing Projects
Since 1st May 2013 we’ve welcomed an updated Scope of Practice: we can now diagnose within our scope, and more recently, we can prescribe radiographs for our patients, if suitably trained and competent to do so. These are truly significant milestones for our profession - but there is still so much more to be done! Limited prescribing rights, problems surrounding NHS contracts, and other legislative limitations all need further thought if we are to make our lives in practice more workable.

A recent meeting with the Northern Ireland CDO threw up yet more questions. I would like to reassure you that Michaela and I will continue to weave our way through the legislation to get clear and definitive answers for you.

Business Review
Along with Penny Hardaker, our Business Development Manager, we have started to bring about changes to place your Society on more of a business-like footing. There’s still a long way to go - some of what we do is based upon long established custom and practice and whilst we won’t be making changes just for the sake of it, a review of these practices is long overdue.

We have recently appointed new accountants and carried out a systems review of our internal procedures, including how our accounts and database can interact. Penny is currently in the process of introducing a new management accounting system so that our finances can be reviewed more easily in future, and any outstanding monies chased with ease.

We aim to appoint a bookkeeper shortly so that the Honorary Treasurer can become just that, Honorary - with a role of overseeing the accounts rather than being expected to single-handedly manage the finances of a Society as large as ours.

There are plans to update the contracts for all employed staff and to introduce annual performance appraisals – just as would happen in any other business - together with an annual review of job descriptions.

Representing the Society
Michaela and I continue to meet with key stakeholders, sponsors and other organisations, including the BDA, GDC, Department of Health (DoH), Tooth Whitening Action Group (TWAG), All Party Parliamentary Group for Dentistry (APPGD), and many others. Last year I spoke at numerous hygiene and therapy schools, our regional group meetings, the Dentistry Show, the BDA Conference and the British Society of Periodontology (BSP) Conference – all necessary to keep the profile of the profession and the Society raised.

We are joining with the BSP in 2015 to host the international Euro Perio
8 conference in London, and are actively involved in putting the programme together. I’m sure this will be a very exciting event for us and our partners in the BSP.

So, what for next year?

My first job of the New Year is to table a proposal to the Department of Health to try to gain us limited prescribing rights – something that Podiatrists and Chiropractors can already do.

The fact that we cannot write prescriptions for our patients for some of the antimicrobials and simple medicines that we come across every day in working practice prevents us from working in the best interests of our patients. With appropriate training this would mean that the long term plan of us being able to undertake work in the community and in nursing homes in order to reach vulnerable and needy groups can become a reality.

I mentioned last year about the need for us to engage more with students – the hygienists and therapists of the future - and we subsequently advertised for two student volunteers on Council. I’m pleased to report that Anjuli Baker and Derrick McCluskey will be invited to attend and contribute to our Council meetings in 2014, although they’re not entitled to vote. They will then write for the Student Page in Dental Health to keep our future members in the loop and give students their own forum within the Society.

In our endeavour to make the Society more appealing to the younger (and young at heart!) generation – we have instigated the role of a social media coordinator at each regional group, so that those members who like to connect via Facebook and Twitter can do so – many groups are now setting up their own Facebook page. This is the way forward if we are to move with the times and we have already issued guidelines around their use.

We will continue to strengthen our links with the schools and we have had further invitations into those we’ve not ventured into for many years - this is a vital link to the tomorrow members.

I would like to forge better links with the British Heart Foundation and Diabetes UK so that we can provide cohesive advice for our patients – and so this will be a priority for 2014. Anyone who has any links with these organisations, please DO get in touch with me as a contact at either organisation would be most appreciated.

I hope that my thoughts are in line with yours and that I can continue to serve you as your President for the next 12 months.

I have to take a moment at this point to thank the BSDHT Council, and the fabulous Executive Team who are always behind me, yet honest and open enough to give me their constructive feedback – they are a most dedicated and motivated team of individuals.

Julie Rosse
BSDHT President
The New BDSHT app: being one step ahead

The BSDHT has an app, which will be launched on the 7th January. You can download it now from iTunes but if you can’t wait, grab your iPhone/iTouch/iPad, search for the BSDHT app in the App Store, install it then read on.

The use of smartphones and tablets has grown considerably in the last few years and is expected to continue to do so, at the expense of desktop computers.1 “I can’t live without my iPhone,” I heard a friend say recently. That is hopefully a gross exaggeration but I think we know what was meant. They really are very convenient, and that convenience should extend to helping make professional lives more productive.

I hope that you will find that this app will help you be just that. The feedback from the many members with whom I had the pleasure to speak and demonstrate the app to at the Annual Conference last November certainly indicated that it should be welcome. The only voices of dissent came understandably from those who have mobile devices made by suppliers other than Apple. App development takes time and money, so because the majority of respondents to a survey carried out earlier in the year revealed that most members with smartphones have Apple devices, the first version has been developed for this platform.

So what does the app do?

When you load the app you will see the main menu screen with eight modules: ‘News’, ‘About BSDHT’, ‘My CPD’, ‘My PDP’, ‘Facebook’, ‘Twitter’, ‘BSDHT website’, and ‘Contact us’. The news module displays the latest events from the website with a summary; select one and you will be taken to the website. Combined with the social media modules you can keep abreast of all the latest developments directly from your phone or tablet.

These features are indeed handy, but what should really make this app a ‘must have’ are the integrated CPD and PDP modules. The former lets you record all your professional development activities, whether verifiable or general, and then summarises your yearly and 5-year cycle totals. The subtotals for your core subjects are also given. This should mean making your annual CPD declarations to the GDC a breeze, and help you to identify easily if you are falling short of the mandatory requirements.

However, this module is more than just a CPD logger. When you enter an activity you are asked to reflect on what you have learned and in the course of doing so record any training needs identified. You can then set a ‘To-do’ which is entered into your calendar. For example, let’s imagine that you are attending a lecture on medical emergencies. Open the app and add the course details. That becomes a spiral (an upward one) facilitated by having it on your mobile device always ready to hand. No more good intentions that fail to extend to helping make professional lives more productive.

So what does the app do?

The BSDHT Editorial board

Andrew Gould

BSDHT Editorial board

References


CLINICAL

Eating Disorders Awareness Week

24th February - 2 March 2014
Sock it to Eating Disorders is the fund raising campaign organised by BEAT during Eating Disorders Awareness Week. The campaign debuted in 2013 with great success and it has now been brought back for 2014. Winners of Britain’s Got Talent, ‘Diversity’, have been chosen to support the campaign; an apt choice, for the dance group is fully aware of the pressures to look a certain way and conform to a specific shape.

Eating disorders affect thousands of people throughout the UK and here Lorraine Paul and Ali Lowe give their perspectives on these often debilitating, complex psychological illnesses.

Lorraine was inspired to write for Dental Health following a presentation given by Debbie and Ollie Roche to her local CPD group in Plymouth. Ollie, a Plymouth College of Art student, was diagnosed with anorexia in 2009 after he became increasingly unwell. He spent two months in hospital having collapsed with multiple health problems due to being dangerously underweight. At his lowest, Ollie weighed four and a half stone; he is 5ft 11inches. Debbie, Ollie’s mum, explained that contrary to popular belief eating disorders are often not about food or weight but rather coping mechanisms for serious underlying issues, many of which are sourced from negative life experiences.

Eating disorders

The three most common eating disorders are:

1. **Anorexia Nervosa**
   Anorexia Nervosa is characterised by a profound fear of food, restrictive intake i.e. self-starvation, excessive weight loss, body dysmorphia (distorted body image) and excessive exercise. Sufferers of anorexia are usually between 12 and 20 years old although the average age for the onset of an eating disorder is 17 years.

2. **Bulimia Nervosa**
   Bulimia Nervosa is a compulsive disorder marked by episodes of un-controllable binge eating followed by self-induced vomiting excessive exercise and use of laxatives or diuretics.

3. **Binge Eating Disorders**
   Binge Eating Disorder is characterised by the fast eating of exceptionally large amounts of food, usually in secret, with an attached feeling of guilt, shame or even depression.

Sometimes the eating disorder may be classed as ‘atypical’ because it does not fit the description of either anorexia or bulimia nervosa.

Eating disorders may develop as a result of various factors which are often interrelated. They may be:

**Interpersonal:**
- Poor communication skills
- Ineffective strategies to cope with life pressures.

**Personal:**
- Issues of low self-esteem
- Distorted body image
- A lack of self-worth
- Lack of friendships
- Family upsets
- Unhappy childhood.

**Socio-cultural:**
- As a result of society and the importance it places on physical appearance.

**Biological:**
- Certain personality types are said to be more susceptible to developing eating disorders.
Sensitively suspect a problem you will need to question the patient very sensitively.

If you suspect a problem you will need to question the patient very sensitively.

Eating disorders differ, but some of the characteristics are shared. Examples of this include:

- A preoccupation with food
- Poor blood circulation
- Excessive weight loss
- Lack of concentration
- Difficulty sleeping
- A feeling of isolation
- Self-harming
- Restriction of certain food types
- A strong desire to help others
- Decrease in academic performance
- Light headedness/dizzy spells
- Wearing baggy clothes
- A keen interest in cooking for others

Debbie explained that eating disorders are very complicated mental complaints which by their nature can make a sufferer very secretive. Therefore, parents, carers or friends should not feel guilty if an eating disorder is not detected in its early stages.

Following Debbie’s presentation, Ollie spoke very briefly about what it was like to live with an eating disorder; he described it as having a voice in his head all the time telling him not to eat. If he did eat, he would then have to exercise, often doing as many as 100 star jumps in his bedroom even though he was so weak he would repeatedly fall down. But, still he was driven by the voice in his head urging him to carry on.

Perhaps of most concern was the fact that during Ollie’s treatment there was no mention of the effects of the eating disorder on Ollie’s mouth and teeth, or any help and advice on how to reduce and prevent potential damage. Because of the lack of assistance Debbie has set up a local support group in Plymouth called NoteDuk (No to Eating Disorders UK). For more information visit www.noteduk.com

Prevalence

Eating disorders among males have increased dramatically in recent years; indeed 1 in 6 of all those diagnosed are male. So, whilst Ollie was far from unusual he was very brave to speak about his illness since many men are deterred from seeking help for fear of being perceived as weak or freakish for suffering from a girls’ disease. We live in a culture where media imagery is directed as much towards men as women and young men are now under more pressure than ever to look a certain way. Fitness is also more important these days which may account for the increase in Anorexia Athletic (a compulsive obsession with exercise), since men are more likely to use exercise as a means of purging rather than laxatives or diuretics.

Nonetheless, eating disorders still affect many more women than men. The aetiology behind this is not yet fully understood. However, women tend to have a more rigid cognitive style as well as higher levels of cognitive anxiety. Further research is needed to establish just why women should be more inherently anxious than men. ‘Diabulimia’ is also more common amongst women, and occurs when patients with Type 1 diabetes refuse to eat or take their insulin.

Evidence suggests that developmental factors may influence a person’s susceptibility to eating disorders e.g. there is often a family history of autism, schizophrenia or depression.

Certain character traits and cultural factors may also play a part. Often the illness has nothing to do with outward appearances. As Ollie explained; if you have an eating disorder it takes on a life of its own and sufferers get to a point where they honestly believe that what people refer to as their ‘eating disorder’ voice has their best interests at heart.

Effect on oral health

With extremely underweight anorexic patients such as Ollie, recognition of the condition is relatively easy. However, bulimic patients often maintain their weight, so several years will often pass before their condition is recognised.

As dental professionals we are often the first ‘medical’ people to detect the condition because the oral and facial signs and symptoms associated with bulimia are so well documented. They are mostly the result of self-induced vomiting and the consequent action of acid regurgitated from the stomach onto the hard and soft tissues of the mouth. Erosion tends to occur in the areas that have maximum exposure to regurgitated acid i.e. the palatal surfaces of the upper anteriors and the occlusal surfaces of the lower molars.

This pattern is easily distinguished from tooth surface loss arising from other causes. Patients will often complain of:

- Sensitivity and discoloured enamel as a result of exposed dentine.
- Painful, swollen parotid glands (aetiology unknown but thought to be as a result of malnutrition).
- Xerostomia from decreased salivary flow and parotid gland dysfunction.
- Dry lips and skin around the mouth.

Systemic conditions include nutritional deficiencies and their oral presentations e.g.:

- Vitamin B deficiency which is associated with recurrent aphthous ulceration.
- Vitamin C deficiency which may cause gingival bleeding (although this is rare).
- Vitamin B 12 and iron deficiency and associated glossitis.

Complications may also arise from efforts to induce vomiting and these include:
• Damage to the palate by foreign objects used to promote a gag reflex (such as a toothbrush).
• Broken blood vessels (both intraoral and extraorally).
• Calluses on the first knuckle of the index finger used to induce vomiting by placing against the incisal edges of the maxillary incisors (often referred to as ‘Nelsons sign’).
• Accidental swallowing of foreign objects.

It is important to remember that unexplained tooth surface loss is one of the principal signs of an eating disorder. If you suspect a problem you will need to question the patient very sensitively and liaise closely with any medical personnel involved whilst maintaining patient confidentiality. Preventive measures to minimise tooth surface loss include:
• Modifying tooth brushing techniques to avoid unnecessary damage.
• Rinsing with water or a bicarbonate of soda mouthwash to neutralise the acid immediately post vomiting and avoiding brushing for at least 30 minutes. Failure to do so can lead to ‘erbrasian’ (a combination of erosion and abrasion);
• Provision of a mouthguard for use whilst purging to protect the surface enamel.
• The use of a daily fluoride mouthwash preferably at a different time to brushing to ensure maximum effect.
• If the patient has a dry mouth, sugar free gum with xylitol should be recommended to stimulate saliva. Those patients who are concerned about the calorific value may be advised that each piece contains just 5 calories and that chewing burns 11 calories an hour. It should be chewed 5 minutes after an acid challenge for a 20 minute period.
• Recommending resources for help and advice.

Conclusion
The role of Dental Hygienist/Therapist is expanding and will continue to do so. We have a responsibility to become more proactive in preventive and educational measures relating to eating disorders. This includes encouraging healthy eating patterns and exercise regimes, avoiding the over valuing of thinness and introducing preventive measures to minimise tooth surface loss.

References

If you would like more information on eating disorders the charity BEAT has a helpline for anyone needing facts or support (0845 634 1414) and charity Men Get Eating Disorders Too has a website forum for users to connect with other sufferers; mengetedstoo.co.uk

About the authors:
Lorraine qualified as a hygienist from Cardiff University in 1986 and has since worked for Exeter Health Authority, and a variety of general dental practices. She also tutors dental nurses on the Oral Health Education Programme and is involved in the Plymouth CPD group in Plymouth, which provides CPD for all members of the dental team.

Since qualifying in 1991 from Cardiff Dental School Ali has worked in the Community Dental Service, Hospital and both private and NHS practice. She currently divides her week between a specialist referral practice, Cardiff Dental School and an Orthodontic practice. She has been an active, enthusiastic member of the SW/SW regional BSDHT group and held the posts of both secretary and council representative and is now a member of the Publications Committee for Dental Health. She enjoys lecturing as well as writing and is a regular contributor to the dental press.

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Peri-implant tissues inflammation: do we have the means to prevent it?

Andrea Pilloni

Key words: peri-implantitis • peri-implant mucositis • risk factors

Abstract
Peri-implant inflammation is becoming an increasingly important challenge for clinicians, as the management of these inflammatory complications remains unclear. This article aims to highlight the most recent data on some issues that are thought to be important in the prevention of peri-implant inflammation and the long-term maintenance of healthy tissues.

Introduction
The introductory sentence of almost every scientific article on the subjects of implants, and peri-implant tissues, emphasises how dental implants have revolutionised the replacement of missing teeth, enhancing the comfort of the patient. Indeed, dental implants are a predictably successful treatment with a survival rate of 95.7% still in function after 10-14 years. But, can implants last forever? And why should this not be possible when the clinician creates the conditions required to encourage the best healthy maintainable state by the dental professional and, above all, by the patient? On the other hand, once the implant is inserted and prosthetically restored, following a comprehensive plan in relation to the adjacent teeth, are anatomical structures and occlusion still at risk? The answer has, for a long period of time, reported to be “yes!”

Plaque accumulation can cause mucositis, just as it can cause gingivitis in the experimentally induced inflammation. Figures 1-3. It is interesting to note the data observing the higher quantity and frequency of bacteria in plaque accumulated around natural teeth, compared to dental implants.

Peri-implant mucositis, as the inflammation is limited to the soft tissues, can be reversible but if not treated it may progress to peri-implantitis, i.e. peri-implant bone loss. The treatment of this inflammation has been thoroughly discussed and it has been found that peri-implantitis has no predictably successful treatment: whereas peri-implant mucositis can be treated. But not one adjunctive treatment is superior to others, or to the mechanical treatment itself. Presently, even though treatable, there is no other protocol for peri-implant tissue maintenance, other than the CIST protocol of Lang et al that recognizes the two conditions arising from the lack of peri-implant bone loss, based on the probing depth above or below 4 mm, as two different treatment protocol conditions.

As clinicians, we are all responsible for its prevention, until further studies on peri-implant inflammation treatments are published. Prevention prior to the implant being placed means creating conditions enabling the patient and the dental hygienist to remove the plaque. The aim of this article is to give three different perspectives: from the patient level, site level and the implant surrounding soft tissues level.

Patient
When deciding on the suitability of a patient for implants, consideration of the following factors which influence the long term health of peri-implant tissues are essential.

Age
The risk for peri-implantitis development increases with age.

Systemic conditions
Currently it appears that an association with peri-implantitis can be found only with cardiovascular diseases but not with other well known diseases such as diabetes mellitus, osteoporosis, lung disease, rheumatoid arthritis, depression and smoking.

Periodontal health
Periodontally healthy patients present a lower risk from peri-implantitis - the incidence is currently 1.8% peri-implantitis in periodontally healthy patients compared to 37% peri-implantitis in periodontally compromised patients. A recent study reports the risk of developing peri-implantitis is fourteen times higher in patients treated for aggressive periodontal disease, compared to periodontally healthy patients. Similarly, Roccuzzo et al 2010 report higher levels of peri-implantitis in severe and moderate cases of chronic periodontitis with both groups being at a higher risk, compared to periodontally healthy patients. Even though periodontal diseases are treatable, the history of such disease represents a risk factor for peri-implantitis. In addition, patients with a history of periodontitis, and following supportive periodontal therapy continue to develop periodontal pockets, are at higher risk than patients in that same group who show stability in the maintenance programme.

Oral hygiene level
Poor oral hygiene is a risk factor for peri-implantitis.

Adherence to SPT
Supportive periodontal therapy is of crucial importance for the
maintenance of peri-implant tissue health to a point that it overcomes the importance of a history of periodontitis when it comes to the risk of peri-implantitis. Poor compliance or adherence to supportive periodontal therapy is a risk factor for the development of peri-implantitis. On the other hand, it has been reported that the insertion of the dental implant enhances the adherence of the patient to SPT and that it is possible to obtain an excellent degree of compliance to this programme.

**Site**

Periodontal disease develops in a periodontal pocket and there are no reasons to consider it differently to the counterpart situation at the implant level. From CIST protocol, the treatment applied in a peri-implant pocket of 4-5 mm in depth (Fig. 4) requires an adjunctive antiseptic treatment besides the mechanical removal of plaque, but no adjunctive therapy is superior to others or mechanical treatment alone. This rationale leads to the prevention of a peri-implant “sulcus” deeper than 3 mm. Deeper pockets, more than 4 mm, even at an healthy stage, provide an appropriate environment for the growth of anaerobic bacteria. This then poses the question as to how this physiological bone loss around implants can be prevented?

Theories related to the physiology of peri-implant bone loss in the first year of function are related to the establishment of biological width (2mm of junctional epithelial and 1-1.5 mm of connective tissue, as reported by Berglundh & Lindhe and to the inflammatory response of the tissues to the presence of bacteria at the abutment-implant junction.

Recently it is speculated that this initial peri-implant bone reaction can be a response to a foreign body. This assumption can be supported by the in vitro results of Quabius et al., 2012 observing an enhanced expression of IL-8 when the human blood is in contact with dental implants. Similarly, but in vivo results, Salvi et al report levels of MMP-8 activity at the implant level higher at all the time-points, even in healthy conditions, compared to the tooth level during the development of 21 days experimental mucositis and gingivitis. Both biomarkers are involved in periodontal tissue destruction during inflammation. In addition, Salvi et al., 2012 concluded that the peri-implant tissue response is stronger to plaque accumulation than periodontal tissues. Once again we need to ask whether it could be that we are indeed dealing with a permanent inflammatory or foreign body reaction to the dental implant and that could this really be the reason why, even when there is less quantity of plaque and percentages of periopathogens, the peri-implant tissues respond more strongly? We currently do not have the answer to these questions but, meanwhile, platform-switching and the insertion of the implants at the level of, or 1 mm above, the alveolar crest can reduce the dimensions of biological width mainly for the epithelial component.

Furthermore, the most recent data on bone loss at the first year in function report figures of 0.02 mm compared to previously accepted physiological bone loss of 1.5 mm.

Cases of regrowth of bone around dental implants following the first year in function, contradict all this theory and indicate the need for further examination and epidemiological evaluation of similar patients.

**Soft tissue**

Keratinized mucosa as a surrounding dental and peri-implant soft tissue presents two components: the width (distance from the free gingival margin to the mucogingival junction) and the thickness (evaluated as thick biotype when it is thicker or equal to 2 mm) and thin biotype when is thinner than 1.5 mm. Both components have been the centre of controversial discussions on the importance that the presence of a thick biotype of a minimum width of 2 mm might have on the oral hygiene and prevention of the inflammation of tissues with subsequent prevention of bone loss (Fig. 5).

**Biotype**

The most recent data comes from a study on the importance of biotype and SPT on the peri-implant bone loss during the first year in function. The statistically significant lower bone loss in the group of thick biotype that followed SPT compared to thin biotype not following SPT (0.09mm vs 0.78mm), permitted the authors to conclude that the
presence of a thin biotype could be considered a risk factor for additional peri-
implant bone loss.

Width: the latest meta-analysis and review on the correlation between presence of
wider or equal KT to 2 mm and inflammation parameters at implant level,
concluded that indeed the presence of a 1-2mm of KT decreases plaque accumulation and the risk for marginal recession and attachment
loss. Interestingly, this amount of keratinized mucosa was seen to be
associated with greater probing depth but a tendency to less bleeding on
probing, even though this differences did not reach statistical significance.28

Conclusion
It can be concluded that even though recent studies focussed on important factors in peri-implant inflammation prevention, they all raise the alarm that further research is needed.

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6. Forget your Graceys, be smart.
The introduction to practice (ItP) scheme for therapists in Wales: an evaluation of the first three years

Barnes, E¹, Moons, K², Bullock, A¹, Hannington, D², Cowpe, J² and Rockey, A²

Abstract

Objectives
Introduction to Practice (ItP) is a foundation (vocational) training scheme for newly-qualified dental therapists. The purpose of this study was to evaluate the scheme with ‘current’ trainees and follow-up previous trainees to gather their retrospective views and career history.

Methods
Following a group discussion, all current trainees (n=7) completed questionnaires. Portfolio extracts were gathered. Trainees (n=8; 67%) from the 2009/2010 intakes completed a postal/online questionnaire. Current and past trainers completed a postal questionnaire (n=12; 92%).

Introduction
Following the extension of dental therapists’ scope of practice in 2002¹ and revisions to the NHS contract in 2006 which allowed therapists to work in general dental practices, their training needs have increased and evolved.²

The Introduction to Practice (ItP) scheme was created by the Dental Postgraduate Section of the Wales Deanery (run within the School of Postgraduate Medical and Dental Education, Cardiff University) in 2003 to provide post-qualification training and mentoring for dental therapists. The scheme was initially developed to cater for the graduates of Cardiff Dental Hospital (now University Dental Hospital) Dental Therapy Course which has been in place since 1996.³ The original ItP scheme included dental hygienists, however as a result of changes to the NHS contract it has been dedicated to therapists only since 2009. Since the programme began in 2003, 47 hygienists and therapists completed it in total; since 2009 nineteen therapists have completed the course (three in 2009; nine in 2010; and seven in 2011).

The scheme is analogous to the dental foundation (DF) year where newly qualified practitioners develop their skills in a structured and educational in-practice environment.³ The current programme runs for twelve months, beginning in January and comprises a series of ten study days and three days a week working in practice with a trainer. Figure 1 provides an outline of study day topics.

Results
Trainees valued the in-practice support and reported that the scheme aided transition from student to unsupervised dental professional and helped them gain confidence in their skills. All past-trainees had remained as practising therapists and felt that the scheme had been useful in developing their career. All would recommend the scheme to others. The majority of trainers were supportive of the scheme; would recommend it to others and would advocate it becoming mandatory.

Conclusions
This scheme provides therapists with an avenue to further develop as practising clinicians in a supportive environment. At the same time, it provides a platform to promote their clinical skills in primary dental care and raises awareness of the contribution therapists can make to the oral health of patients.

Figure 1: Outline of study day topics
The study aimed to evaluate the ItP 2011 scheme, identifying strengths and areas for development and to follow-up previous participants, reporting on current work and retrospective reflections on the value of the scheme.

**Methods**

The procedure and materials used for data collection were adapted from an evaluation carried out in the Oxford and Wessex Deaneries by Bullock et al.¹

Seven current trainees took part in a group discussion held on the final study day of the 2011 academic year. Following the discussion they completed a questionnaire. The questionnaire explored views on perceived strengths of the programme along with areas for development.

Twelve past-trainees and thirteen trainers (2009-2011) were contacted of ItP (i.e. at graduation) and again in month nine were also collected.

Table 2: Self-rated changes in confidence from graduation to end of ItP for 16 aspects of work

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<td>Dental pathology</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Medical record keeping</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>History taking*</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Cross infection control</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Legislation</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Professionalism*</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacology*</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Treating patients under conscious sedation</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 2: Self-rated changes in confidence from graduation to end of ItP for 16 aspects of work

*One response missing

Table 1: Trainees reasons for undertaking the ItP scheme

<table>
<thead>
<tr>
<th>Reason</th>
<th>Total 2011 (n/7)</th>
<th>Total 2009/10 (n/8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To enhance my confidence</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>The in-practice support</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>To broaden my clinical experience</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The structured programme</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>To improve my career prospects</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>No suitable work available</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Results

All seven 2011 trainees, eight past-trainees (2 out of 3 from 2009; 6 out of 9 from 2010) and 12 (out of 13) trainers completed the questionnaire.

Trainees

From a given list, all therapists were invited to identify their three main reasons for choosing to take part in the ItP scheme (Table 1). The most frequently selected overall reason was “To enhance my confidence”, selected by 13 of the 15 trainees. Results from the two cohorts differed from here onwards; the 2011 trainees identified “The in-practice support” as their second most popular reason (6) whereas the 2009/2010 responses identified “To broaden my clinical experience” (5) above this. Four current trainees selected “The structured programme” as a reason for embarking on the scheme however none of the past-trainees identified this as one of their top three reasons.

In an attempt to assess change in level of confidence, from graduation to the end of ItP, for general aspects of their work, the therapists were asked to rate their level of confidence on a 6-point scale (1 = not confident, 6 = very confident) at these two points in time – at the beginning and in the final month of the scheme. Table 2 shows the change in rating and total change score for the 16 aspects of work listed.

For the 2011 participants, restorative dentistry (total score calculated as 3x1 point plus 3x2 points plus 1x3 points) showed the highest increase in reported confidence with twelve points, closely followed by clinical judgement (total score calculated as 3x1 point plus 4x2 points) with eleven.

Clinical judgement received increases of 1-2 points. Although paediatric dentistry showed a -2 decrease in confidence by one person the remaining six reported an increase of one or two points. For topics such as in cross infection control, confidence in communication skills, preventative dentistry and history taking the majority showed no change or a modest increase of one or two points.

The majority reported no change, or a decrease in...
When asked whether they had any concerns about maintaining their therapy skills only one current trainee had no concerns. However, the past-participants’ results were split; half agreed and half disagreed.

The study days
The responses to open questions in the questionnaire asking the therapists to identify the most valuable part of the study day programme broadly showed that the trainees valued hands-on practical sessions (such as METI training). Peer support and the opportunity for knowledge exchange and reflection with other trainees, particularly on difficult procedures was valued. Clinical aspects and the experience gained by working with a range of patients on topics not covered in university were also mentioned.

Suggestions for improvement included holding more study days, potentially over the summer break, and covering more topics.

The in-practice work
A variety of responses were given to a question asking about the most valuable part of the work in the training practice: trainees valued the support they received, working with the trainer, shadowing them and learning new techniques. They also spoke of gaining confidence. For example, treating a large number of patients with varying treatment needs was also identified by one respondent as a way of gaining confidence. Extended appointment times at the start of the scheme were valued.

Guidelines were recommended for the trainee and practice regarding the amount and variety of experience they should be completing each week/month during the in-practice sessions. The possibility of more flexibility in appointment times in practice and working full-time were also raised.

Improving trainer and other dentists’ awareness of the role of the therapist was also suggested. If dentists were able to explain the therapist’s role, this could help address reluctance from patients to see a therapist.

Table 3: Trainees views on the ItP scheme

<table>
<thead>
<tr>
<th>Statement</th>
<th>2011 trainees</th>
<th>2009/2010 trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>My trainer provided good support in the practice</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>An ItP scheme should be mandatory for all newly graduated therapists</td>
<td>1 1 1 3 3 2</td>
<td>1 1 3 2 3 4</td>
</tr>
<tr>
<td>The workplace-based assessments provided good feedback on my performance*</td>
<td>3 2 1 2 2 1</td>
<td>1 1 3 3 4 0</td>
</tr>
</tbody>
</table>

*One response missing

The results showed that participants were also very keen to use the full range of their therapy skills and that the learning portfolios aided their progress.

Agreement that they felt well integrated into the practice was high, however the statement “My trainer provided good support in the practice” ranked third lowest in agreement with only “The workplace based assessments provided good feedback on my performance” and “I feel the undergraduate course prepared me well for starting work as a therapist” scoring lower for 2011 trainees. Two of these statements received more favourable responses from past-trainees.

Most-valued aspects
When asked what they had enjoyed most about the ItP scheme as a whole, respondents talked about the support from other newly qualified therapists and the opportunity to discuss their experiences with them on study days. Others talked of broadening their skills and gaining confidence. One praised their training practice for being supportive. One respondent identified several areas of their experience:...
Post-trainees
All respondents were still working in dentistry in a variety of hours and employment/salary conditions. Most carried out a mix of hygiene and therapy, one carried out mainly therapy and two did mostly hygiene work. Since completing the scheme three respondents have continued working at their training practice, either on a full or part-time basis. All respondents felt that the course had helped them in their work. They told us how the scheme had increased their confidence in their ability to carry out treatments, in working with patients and to feel ready to apply for therapy posts. Others explained that as well as updating their knowledge it provided an opportunity to stay in touch with graduating colleagues and had aided them in getting started with their CPD requirements. All eight respondents would recommend the scheme to others, telling us that they valued the scheme as an enjoyable and supportive yet structured place in which to develop confidence in their skills:

“Starting out alone is very daunting and knowing you have further support is a must.”

The scheme also aided their transition from the student to professional role:

“It makes the transition from University to working in practice much easier.”

The trainers
All but one respondent thought the study day programme was well matched to their trainee’s needs (one was unsure) and all thought that the workplace-based assessments were good mechanisms for providing feedback on the therapist’s performance. One trainer stated that:

“Asessments in a working environment are essential for a vocational profession such as dentistry including hygienists and therapists.”

When asked what they thought the trainees had gained from being part of the scheme respondents mentioned confidence in their abilities during the transition from student to practitioner. The benefits of in-practice work included experience of working in a team, the on-going support provided by the team, gaining a broad range of experience and working with a diverse range of patients. One commented on the interaction with other trainees at the study days; financial stability was also identified by one trainer.

The majority of trainers said that the trainee’s initial clinical skills were better than they had expected and all would recommend employing a therapist to others. Most reported that their experience as an ItP trainer had increased their likelihood of employing a therapist and almost all trainers would have liked to employ their trainee in their practice.

The trainers were asked what they thought the best thing was about having a dental therapist in the team and what was the biggest challenge. The therapist’s enthusiasm and ‘fresh outlook’ was seen as a benefit to the team by one trainer. Having a therapist providing ‘another pair of hands’ within the practice was thought to increase flexibility and benefit patient management. This freed up the trainer’s time to work with anxious patients, aided the completion of time-consuming NHS cases and increased the practices gross income. One trainer told us:

“In a well-run practice it is the only way to maintain standards and make a profit for routine NHS treatments.”

Only one trainer told us that there were no challenges to having a therapist in the dental team. Payment and working within the NHS contract in a way which is financially viable was a problem for some. The therapists’ remit and scope of permitted work, particularly as they are unable to diagnose and plan their own treatment and the therapist being unable to provide emergency care in a single-handed practice were also highlighted. Referring patients was a concern for two trainers; in both providing a suitable amount and a varied work balance.

Overall, the trainers’ opinion on the scheme was positive – eleven trainers reported that they would recommend being an ItP trainer to others and ten thought it should be mandatory for all newly graduated therapists.

Discussion
Respondents told us how the ItP scheme provided the opportunity to gain the confidence in their clinical skills that they felt had been missing on graduation and assisted in their transition from the role of student to competent health professional. A combination of study days and supported in-practice experience was credited for the increase in confidence whereas a lack of practical experience lay behind the lower confidence scores, despite having a good theoretical knowledge. However, maintaining their skills in the workplace was a concern for both current and past-trainees.

The majority of ‘current’ trainees wanted to carry out a mix of therapy and hygiene tasks in future employment; only one past-trainee wanted to carry out more therapy work. Turner, Ross and Ibbetson’s finding that carrying out a variety of clinical activities was the most influential direct predictor of job satisfaction amongst dual-qualified hygienist/therapists H/Ts was supported by our findings.

Overall, trainers’ opinions on the scheme were positive. Such responses (trainee’s skills being better than expected,
Many therapists who graduate will either not be fully employed or will need to work in a number of different practices to ensure full-time employment. It is worth noting that under the current NHS contract it is difficult for trainers to benefit financially from employing a therapist. However a new Welsh Dental Contract is being piloted. The pilot has enabled greater flexibility within the practice; for example it has provided an opportunity for “more collaborative and less dull” ways of working, involving therapists and oral health educators. The changing profile of the workforce and identified improvements in the fiscal systems suggest a growth in this area that may continue. In their guidance on Direct Access the GDC strongly recommends that newly qualified hygienists and therapists should take the opportunity to practise in a sheltered environment, working on prescription in a supportive team. It has been suggested by the GDC and the British Society of Dental Hygiene and Therapy (BSDHT) that this period could be 12 months. There are now three schemes similar to ItP running from Deaneries in England: North West Deanery, West Midlands and Oxford/Wessex. This scheme shares key similarities with each of these; all combine part-time placement in a training practice with a study day programme (covering similar content) and completing learning portfolios. However, the content, assessments and curriculum of each scheme are currently determined within each Deanery. If it were a compulsory course akin to Foundation Year, as there is for dental graduates wishing to work in the NHS, it would appear that there is a place for schemes of this nature particularly in view of Direct Access and the additional skills and responsibilities within. The foundations of this course could provide the framework for a national programme, as it was found to be a both an acceptable and appropriate platform for addressing graduate therapists’ learning needs.

References

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Address for correspondence:
BarnesEj@cardiff.ac.uk
CLINICAL QUIZ

ANSWERS TO NOVEMBER QUIZ: ORAL CANCER... YES OR NO?

1. Yes
2. No - Frictional keratosis. Lesions limited to area that can be chewed.
3. No - Pyogenic granuloma. Rapid onset (days), painful, bleeds on touch
4. Yes
5. No - Traumatic ulcer. Related to sharp surface on tooth.
6. No - Lichenoid reaction to amalgam. Lesion limited to area of mucosa in contact with amalgam.
7. Yes
8. Yes
11. Yes
12. Yes

Q1. When would you use this?

Q2. What is the recommended dose?

Q3. How can the dose be administered if the patient is unable to use the inhaler effectively?

This quiz was kindly provided by Huw Thomas and Tracey Morris, Smile Studio, Penarth.

Send your answers to the Editor by 28th February. The first correct answer out of the bag wins a top of the range Triumph Oral B toothbrush (retailing at £150) courtesy of Braun Oral B.