BDJ Team
SEPTEMBER 2016

Dental hygienist *trailblazer*

BDA
British Dental Association

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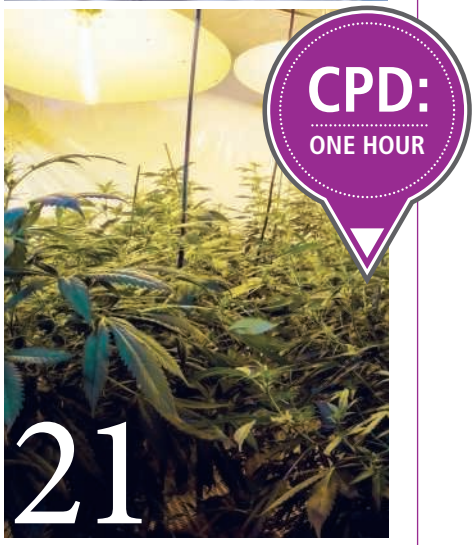
www.nature.com/bdjteam

Highlights



Regulars

In this issue

Ed's letter

When I was at primary school, we were tasked with writing about what we wanted to be when we grew up. I vividly recall writing that I wanted to be an ice cream man. This early dream to be surrounded by many flavoured ice creams and chocolate flakes, in a confined space in the back of a van [and male] was not to be realised. Jo Kennedy, however, the dental hygienist headlining this issue of *BDJ Team*, has made her dream (which also involves a van) a reality.

A real life fairy p13

Jo Kennedy mused over the prospect of starting her own business for 14 years. Then when the new rules over direct access to patients were announced in 2013, Jo seized the opportunity with both hands and - after a lot of hard work - The Sparkle Fairy was born. Read all about Jo's journey, with her husband and young daughter along for the ride, this September in *BDJ Team*.

Trolls not welcome p10

An online presence is essential to the success of Jo's business, as increasingly it is to all dental practices in the twenty-first century. Likewise, *BDJ Team* has received a boost in traffic itself this year as a result of some carefully targeted posts on our own Facebook page (www.facebook.com/bdjteam).

But what do dental professionals need to be careful about when posting online? DO use social media to keep up to date with the latest news in dentistry, says Reena Wadia, a dentist on *BDJ Team*'s reader panel; DON'T publish patient identifiable information. Thank you to Reena for investigating the social media revolution in this issue.

If you do follow *BDJ Team*'s Facebook page, you will already know about our big announcement for this autumn. *BDJ Team* CPD has moved to the BDA's hugely popular CPD hub. It's easy to use, free, and any GDC-registered professional can take part. As we go to press, the site already offers EIGHT FREE HOURS of verifiable CPD from content published this year in *BDJ Team*, in addition to other CPD content on child protection and oral cancer.

Want to give it a go? Visit https://cpd.bda.org. And let me know how you get on!

Wicked weed, p21

Kate

Kate Quinlan
Editor
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BDJ Team CPD joins the CPD hub!

bdjteam2016129

THE TEAM

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Is flossing a waste of time?

In early August dental flossing hit the mainstream headlines following news that the United States health department has removed daily flossing from its list of dental recommendations, due to a lack of evidence to support its effectiveness. The NHS is now reviewing its guidance on flossing the teeth.

A US investigation found that there is no proof that flossing prevents gum disease or stops cavities. Despite this, American dentists have recommended the use of floss to patients since the late 1800s.

The British Dental Association's (BDA's) scientific adviser, Professor Damien Walmsley, was widely quoted as saying that floss can be 'of little value', and that small interdental brushes are preferable for cleaning the area in between the teeth, where is space to do so.

'It is important to tell people to do the basics,' said Professor Walmsley. 'Flossing is not part of the basics.'

The dental fraternity quickly responded to highlight and emphasise the importance of regular interdental cleaning.

Michaela ONeill, President of the BSDHT, said that reports that flossing can actually be damaging to oral health are misleading and commented: 'Although there has been no conclusive proof to show that flossing is beneficial to oral health, there is evidence which shows that regular interdental cleaning with interdental brushes plays an important role in our oral health routine. Regular interdental cleaning removes the biofilms that develop in-between teeth. This is commonly called plaque and hosts various microorganisms which, if left *in situ*, can lead to dental decay. It is this plaque that we aim to remove daily.'

A wider round-up of views on flossing was due to be published in the *British Dental Journal* on 26 August. Look out for a link on the *BDJ Team* Facebook page www.facebook.com/bdjteam.

BSDHT **condemns** sweet factory advert

The British Society of Dental Hygiene and Therapy (BSDHT) has branded Rowntree's 'The Smile Factory' advert misleading and irresponsible for its portrayal of sugary sweets being linked to happiness and smiling.

The advertising campaign suggests consuming Rowntree's Fruit Pastilles, Randoms, Jelly Tots, Tooty Frooties and Fruit Gums is good for your smile and is calling for more health considerations to be made when advertising sugary foods.

Michaela ONeill, President of the BSDHT, says sweet manufacturers must have an ethical responsibility to safeguard public health: 'While many of us will suffer from having a "sweet tooth" and enjoy sugar in moderation, having an advertising campaign positively linking sugary sweets to the smile is dangerous and reckless.

'Not only does the name of this campaign imply that sweets are good for smiles, by proxy it also positively links sugar with good oral health. The manufacturer behind it should have taken greater steps to act more responsibly for the benefit of the public's health.'

Rowntree's Fruit Pastilles contain more than 55% sugar while Tooty Frooties are made up of more than 70% sugar.

The BSDHT is now urging the advertising watchdog to investigate the campaign and has expressed their surprise regarding its approval given a clampdown on junk food advertising was singled out as a priority by advisers at Public Health England.

'As dental hygienists and dental therapists, we see first-hand the damage that sugar causes, and particularly with children the results can be heart-breaking. Advertising bans on sugary foods and drinks, along with more broadcasting promoting healthier alternatives, will give people in the UK the best possible chance of a healthy life and reduce the amount of sugar we consume,' says Ms ONeill.

James is new DTA president

James Green has been elected the ninth president of the Dental Technologists Association (DTA), the professional representative body for dental technologists in the UK.

James authored the *BDJ Team* articles *Dental materials: The multi-stranded wire retainer* (April 2015) and *Dental materials: The Adams family* (December 2014). He is currently a maxillofacial and dental laboratory manager for London's Great Ormond Street Hospital for Children and the North Thames Cleft Centre, a supra-regional network for patients with clefts of the lip and palate from North London, Essex and South and West Hertfordshire. This service is run jointly by Great Ormond Street and the St Andrew's Centre for Plastic Surgery at Broomfield Hospital near Chelmsford so he also works there for part of the time.

James trained at Barts and the London, Queen Mary's School of Medicine and Dentistry in association with Lambeth College and qualified in 2001. After a vocational training year at the Royal London Hospital he spent the following two years at the Eastman Dental Hospital, part of the University College London Hospitals NHS Trust, before transferring to Great Ormond Street in 2004.

James has been the recipient of several awards including the Quintessence Book Prize for the best student from a London teaching hospital, the British Orthodontic Society Technicians Award and the Fellowship of the Orthodontic Technicians Association.

http://www.dta-uk.org

Gillian scales Ben Nevis in support of **HPV jab for boys**

Dental hygienist Gillian Fenwick has climbed Ben Nevis in a bid to raise awareness and valuable donations for mouth cancer.

On 29 May, the dental hygienist from Thornton, Middlesbrough, who was named Dental Hygienist of the Year at the Dental Awards earlier this year, took part in the oral health initiative Moveit4smiles, a project which aims to tackle mouth cancer while campaigning for boys to receive the Human Papillomavirus (HPV) vaccination.

Gill, was joined by her two sons, Bailey, 16 and Harvey, 12. The trio tackled Ben Nevis, the tallest mountain in the UK, standing at 1,346ft above sea level, head-on.

Gill believes strongly in raising awareness of mouth cancer and campaigning towards the NHS provision of an HPV vaccination for all boys, which is currently only available for girls.

Gill said: 'HPV is responsible of numerous diseases and has been estimated to be the cause of 5% of all cancer cases. There is a vaccination available, but presently it is only given to girls because of its link with cervical cancer. Indications are that the vaccination will be available to be prescribed to boys in 2020. Until then a generation of our sons, brothers, grandsons and nephews will pass through to adulthood unprotected.'

HPV is the most common sexually-transmitted disease which almost every sexually-active person will get at some time in their lives. Fortunately, most people with HPV never develop symptoms or health problems.

Gill was supported by her colleagues at Identity Dental Care in Billingham, who are also taking part in the Moveit4smiles Pedometer Challenge, which sees them walking steps for mouth cancer over four weeks.

The Pedometer Challenge encourages dental practices and professionals to campaign with their families, friends, colleagues and patients to get fit, have fun, improve their health and help raise awareness and money for mouth cancer.

To find out more visit www.moveit4smiles.org/challenge.

CORE CPD: ONE HOUR

Free CPD moves to BDA CPD hub

BDJ Team's free CPD questions are moving to the British Dental Association's (BDA's) CPD hub. The BDA CPD hub is also home to additional free CPD courses for dental professionals, such as Child Protection and the Dental Team and the Oral Cancer Recognition Toolkit.

Since 2014, *BDJ Team* CPD questions have been published on a website hosted by Nature Publishing Group. This site will remain live for now so that regular users can access their certificates from CPD they have already completed. Go to www.nature.com/bdjteamcpd to save or print off your certificates.

All CPD questions on the BDA CPD hub are free to GDC-registered dental care professionals (DCPs). The site is very user-friendly and no subscription or payment is required.

To take part in *BDJ Team* free CPD on the BDA hub, just go to https://cpd.bda.org.

BDJ Team itself will continue to be published ten times a year at www.bdjteam.co.uk.

President's column *Jane Dalgarno BSc, BADN President*

Life as BADN President continues to be busy but enjoyable. I have enjoyed meeting many of you at various events, over recent months, and look forward to welcoming a number of you to the National Dental Nursing Conference in Blackpool, on 28-29 October 2016. Registration for conference is now open and promises to be an interesting and thought-provoking programme. Further information on conference and how to register can be found at: www.badn.org.uk.

It gave me great pleasure to have presented Pam Daley with the Outstanding Contribution to Dental Nursing Award at this year's BDA Honours and Awards Dinner. Again, many congratulations Pam.

I was delighted that the Association was invited to support the British Society of Periodontology in their Gum Awareness campaign in May and show how dental nurses can work actively with patients to reduce the risks associated with periodontal diseases on both oral and general health.

It was with interest I attended the British Society of Paediatric Dentistry (BSPD) Stakeholders Day to learn more about the society's campaign to ensure all communities in the UK have timely access to a paediatric dental specialist, including the availability of urgent dental care services. It was evident that the Society, along with the dental profession, is key in securing an equitable dental service for one of the most vulnerable groups in society.

I appreciated the opportunity in June to have met with Sara Hurley, Chief Dental Officer, to discuss how the Association can support what is happening nationally in dental nursing. I am delighted that NHS England have a number of opportunities for dental nurses in the form of clinical fellows for those individuals wishing to expand their portfolios and have a direct influence into the dental profession.

Likewise, I attended a meeting with the GDC to discuss the proposed changes to healthcare regulation and its possible impact on the dental nursing profession. It was evident that the GDC needs to continue to work collaboratively with other regulatory bodies to ensure an efficient and effective reform system.

Finally, I was delighted to have met a number of dental nurses working within the armed forces at their recent conference. It was great meeting you and I look forward to working with you in the future.

Do you have **appropriate** indemnity?

As the deadline for dental care professionals (DCPs) to renew their registration with the General Dental Council (GDC) approached at the end of July, the Dental Defence Union (DDU) reminded DCPs that it is their responsibility to ensure they have access to indemnity in their own right or that appropriate arrangements are in place via their employer.

Following a legal change, the GDC changed its rules in November 2015, meaning all dental professionals applying to register or renew their registration will need to tell the GDC they have indemnity arrangements in place for their scope of practice, or will have by the time they start practising.

John Makin, Head of the DDU, said: 'We have received a number of queries, particularly from dental nurses, about whether the indemnity they have in place meets the GDC's new requirements. Our advice is to check with your employer if you are not sure about what indemnity arrangements you have in place in the first instance.'

The GDC has published some Frequently Asked Questions about indemnity at http://www.gdc-uk.org/dentalprofessionals/standards/pages/indemnity.aspx.

End of NHS bursary undermines the dental team

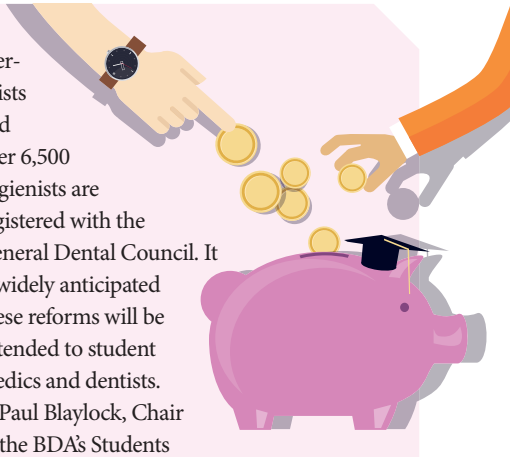
The British Dental Association (BDA) has criticised government plans to strip dental hygiene and dental therapy students of the NHS bursary.

Many student dental therapists, hygienists, nurses, midwives and other Allied Health Professionals are funded through the scheme, which includes support towards living costs and students' tuition fees. Full time students also qualify for a £1,000 non means tested maintenance grant. This funding system is set to be replaced by full student loans from September 2017.

The BDA has said the move would significantly increase debt levels, and deter students from less privileged backgrounds or those undertaking second degrees. It has also cautioned that the reforms could put many dental hygiene and therapy course providers under threat of closure, and would not allow for sufficient workforce planning - threatening the delivery of the *NHS Five Year Forward View*.

The changes proposed by the Government for 2017-18 would leave the average student with a maintenance loan of £7,263 and a tuition fee loan of £9,000 – with the BDA estimating a likely increase of over £11,000 in average costs to each student per academic year. Research has estimated that any savings generated by axing the bursary would be more than wiped out by an increase in spending on agency staff and overseas recruitment costs.

The BDA recently joined with leaders from 19 other health care trade unions, charities and professional colleges to call on the Government to halt the plans to reform student funding. At present over 2,500 dental therapists and over 6,500 hygienists are registered with the General Dental Council. It is widely anticipated these reforms will be extended to student medics and dentists.



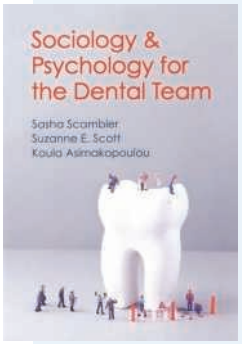
Paul Blaylock, Chair of the BDA's Students Committee, said: 'Dental hygienists and therapists are instrumental in delivering treatment, prevention and healthcare education to patients. The Government says prevention and public health require a "radical upgrade", yet this cut is an entirely retrograde step, that would deliver no savings and simply serve to undermine dental teams.'

Books for dental care professionals

Dental professionals review some of the latest publications on the market.

Sociology and psychology for the dental team

This book is written by Sacha Scambler, Suzanne E. Scott and Koula Asmakopoulou and published by Polity. It costs £21.99 (ISBN 9780745654348).



Combining the disciplines of social and behavioural sciences in text seems a tough task, but this book manages to do so very well. Engaging text and clarity of illustrated tables and charts bring the theories and evidence together in a way that facilitates referencing with ease. Scambler and Asimakopoulou present the 'human side' of dentistry; they place the provision and perception surrounding oral healthcare in the context of today's contemporary society using logical sequencing and accessible language throughout.

At first glance this book looks like it might be best placed amongst those textbooks that line your dusty shelf reminding you of endless days of study. There is clear focus on giving the reader well referenced critical introductions to theories and practice whilst introducing current online sources of discussion alongside journals. The format

> 'I would suggest this book should be as far away from your dusty shelf as possible, deserving to be well thumbed and bursting with post-its and scribbles'

presents easy access to clearly defined subject matter and leaves plenty of margin room for personal notes. The discussion points prompt your own critical thinking as well as cementing the high tariff points in the text. This makes it ideal as a teaching aid for all team members from undergraduate through to post-doctoral level.

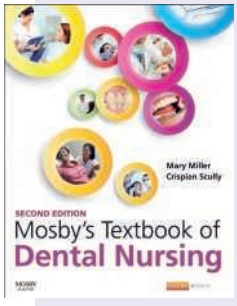
Further reading begins to uncover a much broader and current target audience, those in dentistry who seek to understand the journey to best practices for both patients and team members: in this group I would include the coaches and trainers in our industry. The focus on behavioural science is well thought out; there are definitely passages that you could read today and work with a sense of informed practice tomorrow.

There is value in the book's content for the whole dental team, not just directed at how we work with the patients, but how we work with each other. No doubt it will find itself a future on the dental student's reading list, and I am sure there will be new editions in years to come. I would suggest this book should be as far away from your dusty shelf as possible, deserving to be well thumbed and bursting with post-its and scribbles that refer to practice, training, provision and policy. It is the most relevant book of its kind.

Sarah (Bobby) Keeling RDH Dip Dent Hygiene AdvDIHP (CCTS) (pictured)

Mosby's textbook of dental nursing, 2nd edition

This book is written by Mary Miller and Crispian Scully and published by Elsevier. It costs £34.99 (ISBN 9780702062377).



This textbook is easy to read and navigate through. It is clearly divided into broad sections covering topics from chairside dental care to relevant legislation and standards. Important facts are laid out in 'Key Points' boxes and crucial definitions are outlined. There are also 'Find out more' areas that highlight resources (such as website links to guidelines and articles) should the reader wish to further their knowledge. The 'Identify and Learn' sections have some appeal as they encourage the reader to study and relate to their surroundings. Examples include identifying a local NHS dentist that patients can register with, or recognising specific materials used in practice.

The content itself is largely well written, offering depth and background to the reader. In the anatomy and charting sections, the use of clearly described and labelled images effectively complements the text. Consequently, traditionally challenging topics are made more comprehensible.

As the second edition, this updated version includes various additions, most notably information on the appropriate use of social media. Given the widespread use of multiple social media outlets, advice on how to avoid litigation and ensure proper conduct 'online' in accordance with the GDC standards is a smart and relevant inclusion.

For student dental nurses preparing to sit for examinations, the textbook seems to be a good source of revision. Similar to many textbooks, there is the option to download an image bank and practise multiple choice questions (MCQs) from the accompanying website, to help test and consolidate knowledge.

The reader must be aware that the textbook follows the National Examining Board for Dental Nurses (NEBDN) and is aligned with their qualification requirements. Different institutions may suggest students use other publications thus it is important to liaise with relevant staff. It is also wise to flick through this textbook in order to familiarise yourself and determine whether the style is suited to you.

Overall, the textbook adopts a holistic approach to patient care. Delivery of relevant legislative and regulatory information is well considered and appropriate emphasis has also been placed on ethical and professional practice.

N. Doshi

Monkey's guide to healthy teeth

This book is written by Helen Sadler and is available from https://www.monkeywellbeing.com/shop/monkeys-guide-to-healthy-teeth/ at a cost of £3.95 or as part of a multi-buy saver purchase.

This book comes with an activity guide, a Monkey puppet and an online resource. The 'Monkey's Guide' evolved due to the author, Helen Sadler, having an 18-month-old daughter who faced major surgery. As a family, they felt extremely anxious and so they made a homemade storybook – the theme of 'Monkey's Guide' was born. There are many other titles in the guide for various procedures or hospital visits.

I would say the book is more of a magazine, entitled *Monkey's Family Visits the Dentist* with 18 colourful pages showing real life photographs on every page. It is a very realistic journey with Monkey and his sister Josephine and Dad (who are not monkeys) who travel to a dental practice for a check-up with a dentist. A variety of photographs capture the various stages involved in an appointment with the dentist. The combination of products given with this pack, including colouring pencils and stickers, make learning fun and interactive, alleviating any fears. The online resource is particularly helpful if any further information is needed.

> 'Families can read this or complete the activity guide together, which has lots of hidden dental facts throughout, along with stickers and a "Terrific Teeth Cleaning Chart".'

This dental aid looks like it is targeted at young children around the age of 5-7, although a specific age range is not given. Families can read this or complete the activity guide together, which has lots of hidden dental facts throughout, along with stickers and a 'Terrific Teeth Cleaning Chart'. The real-life photographs of decayed teeth and the diet advice are particularly good. The Monkey puppet that comes with the pack would, I imagine, provoke fun in what could be a potentially daunting procedure for a child. The Monkey puppet could also be transported with the child to any hospital or dental visit and if there is a range of books in this series, the monkey could be interchanged among them.

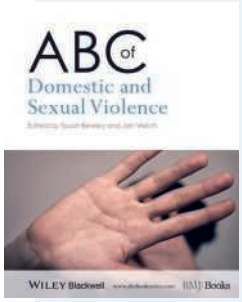
As with any book, there are potential negatives. The photographs including the dentist show his dental mask to be untied. This would not meet infection control standards that are emphasised to the dental profession. As far as the child lying on the dental chair, the position shown could be seen as incorrect; paediatric standards ensure the child's hands are kept around the area of the stomach or by a child's side to ensure safety to the dentist and child.

However, the overall impression for this interactive guide has been very well thought out, combining interaction and education. The variety of apparatus aids the child in having fun and associating a visit to the dentist in a non-threatening manner. I would recommend this to families with young children or multiple children who visit the dentist.

Christine Lyttle BDS (pictured)

ABC of domestic and sexual violence

This book is edited by Susan Bewley and Jan Welch and published by Wiley Blackwell. It costs £21.99 (ISBN 9781118482186).



The first edition of *ABC of domestic and sexual violence* complements the existing series of *ABC books*. Both the editors are passionate about this subject and, with this book, aim to improve health services to support families suffering domestic and sexual violence.

This book is targeted at all teams providing healthcare, and aims to increase knowledge and confidence to enable the team to identify, question and act appropriately within this realm. It highlights when, where and how to achieve this most effectively within conventional healthcare settings.

The 26 chapters are conveniently titled and penned by various authors. The authors provide a valuable picture of each topic and go on to identify noteworthy points and give very practical ideas of how to cope when faced with a domestic and sexual violence issue. Case examples are described in many chapters, including 'The Dental Team'. These case scenarios provide real insight into what 'survivors' (classically termed 'victims') may be thinking and feeling. Signposts to online resources and descriptions of available services that patients may be referred to are included. To understand the evidence base of each topic, further reading is recommended. A 'Risk Identification Checklist' provided as an appendix gives front line practitioners the basic tools to identify high risk cases.

However, 'The Dental Team' chapter is rather disappointing as it provides no additional information beyond what is learnt and understood by a recent graduate. Alone, this chapter is poor as a clinical tool, but it identifies further chapters and this is where the real information can be found.

The book goes on to consider documentation and how clinicians may be involved in court proceedings. The points made and lessons learnt listed here can clearly be applied to many situations dental teams commonly find themselves in.

The book very effectively challenges traditions and viewpoints, including female genital mutilation, as well as questioning male circumcision. It also does not forget the less obvious groups involved in domestic and sexual violence: males, children, the vulnerable or elderly and the perpetrators themselves.

Despite the distressing subject, the book is thoughtful and non-apologetic throughout and allows the reader to see the true value in its pages and not be put off by taboos. Overall, the book achieves its aim of empowering healthcare workers to ask searching questions at appropriate points, whilst providing clear structured guidance and excellent signposts.

C. Molyneaux

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The *do's* and *don'ts* of social media

Reena Wadia[1]

The social media revolution

We are at the beginning of a huge shift in the way dental professionals connect, learn and communicate. A shift which is clearly transforming the profession and its future. I am of course talking about the social media revolution.

Social media is defined as the 'software that enables individuals and communities to gather, communicate, share and in some cases collaborate or play'.[1] In other words, that's social networking sites such as Facebook, Twitter, LinkedIn, Google+ and Instagram.

The aim of this article is to share a few important do's and don'ts whilst exploring these social media platforms. This is in no way an exhaustive list but whether you're an avid user or newbie, I hope you can pick up some helpful tips.

1. DO connect with friends and colleagues

The well-known six degrees of separation theory states that everyone in the world is six steps away, by way of introduction, from any other person. However, thanks to social media, it appears the six degrees are now shrinking! As explained by Facebook on their research blog 'each person in the world (or at least among the 1.59 billion people active on Facebook) is connected to every other person by an average of three and a half other people'.[2] So whether it's through sending a Facebook friend request, a LinkedIn invitation or following on Google+, social media is the perfect way to connect with current and new friends from all over the world.

Here are a few tactics which may help whilst connecting:

---

[1] *Associate dentist/clinical tutor and member of* BDJ Team's *reader panel*

a) Follow rather than friend

Facebook lets you follow someone without friending them. When you're on the profile page of someone who has this feature turned on, you'll see a 'follow' button to click, next to the 'add as Friend' option. When you follow someone, you see their posts in your newsfeed, just as you would when you become friends with someone. The big difference between friending and following is that there need not be reciprocation from the other person. So if you want to see what *insert name of your dental role model* posts but s/he doesn't return your friend request, you can follow instead.

b) How do you say that?

You may be connected with users from all over the world who speak many different languages. If you want to teach your friends how to *actually* pronounce your name, Facebook can help you with that! To add a pronunciation guide, go to the 'about' section of your profile and click on 'details about you' then 'name pronunciation'. Here, Facebook will offer suggestions for your first and last name that you can listen to before selecting. If these aren't suitable, you can also type in your own phonetic pronouncer.

'IF YOU WANT TO SEE WHAT *INSERT NAME OF YOUR DENTAL ROLE MODEL* POSTS BUT S/HE DOESN'T RETURN YOUR FRIEND REQUEST, YOU CAN FOLLOW INSTEAD.'

c) Messaging someone you're not yet connected with

If you want to get in touch with someone on LinkedIn but you have yet to make a one-to-one connection, you can work around this by joining a common group. Group members can message each other even without a direct connection. Click on the person's name in the group, and you'll see an option to 'send message' in the drop-down under 'follow'.

d) Downloading a list of your connections

If you're using LinkedIn, you can download into a spreadsheet - via a number of different formats - a full list of your connections, including their name, current title, workplace and email address. Click on 'connections' in the top menu at LinkedIn, then 'contact settings' and 'export LinkedIn connections'.

2. DO use social media to keep up-to-date with the latest in dentistry

Social media platforms allow educational content to be shared in a more accessible form and the volume of content available is remarkable. Often when I'm browsing my Facebook newsfeed, I spot something that grabs my attention but don't immediately have time to read or watch it. If you're ever in this situation, Facebook has a useful feature that allows you to save a link to come back to later. To do this, click on the 'save' option in the drop-down menu under the top right corner of the post you'd like to save. 'Save' also shows up on pages. To find your saved posts again you can head to https://www.facebook.com/saved/ and on mobile tap 'more' from the navigation and then you should see an option for 'saved'. You'll be directed to a complete list of all the posts and pages you've saved, viewable as a single list or broken down by category.

Twitter is similarly a great platform if you're looking for the latest news or articles. One of my favourite Twitter feeds is by the *BDJ* (@The_BDJ), which provides regular links to abstracts of the latest publications. If you're a big Twitter fan, you might want to manage your account via SMS by visiting your Twitter settings. You'll receive a custom number through which you can receive various updates. So for example, you can retrieve the latest Twitter updates posted by a particular account via SMS by sending 'GET [username]' to the custom number.

ResearchGate is a platform that allows scientists to connect, share research papers and collaborate. Even if you're not regularly publishing articles, ResearchGate allows you to follow prominent authors in the profession, it notifies you of their latest research papers and there is also a facility to request the full article text from the author if it isn't already available on the site.

3. DO check out the latest events

Facebook events are particularly useful if you want to find out about the latest events that are taking place in the dental world. If you regularly use Google Calendar, it might be helpful to link this to your Facebook events. This is helpful to plan and organise both work and social schedules and ensures you don't miss any important occasions! To do this, head over to 'events' on Facebook, and click on one of your 'upcoming events'. Once you're on the event page, click on the 'options' button and select 'export event' from the dropdown. Copy the URL under 'subscribe to all upcoming events on your calendar'. Once you've copied the URL, open up Google Calendar and on the left-hand side you'll see an option called 'other calendars'. Click on the drop down next to 'other calendars' and choose 'add by URL'. Insert the URL you copied from Facebook and your Facebook events will now sync with Google Calendar.

4. DO join groups

I'm sure you'd agree that one of the best ways of learning is through informal discussions with our peers and colleagues. A great way to do this is through joining groups on social media such as Facebook and LinkedIn. Some of my favourite Facebook groups include 'For Dentists by Dentists', 'Dental Roots' and the 'Dental Hygienist & Therapy Network'. When I'm following discussions in these groups and want to go back to a post, link or comment, I find it helpful to use the search function.

If you're part of a Facebook group and interested in asking members a particular question and want them to pick from a specific set of answers, use the Poll feature. Choose the 'create poll' tab inside the status update bar. Click 'add poll options' to enter multiple-choice options. Google+ also allows you to run polls with individuals in your circles. Ask a question in your Google+ post and click on the 'poll' button.

If you're looking for someone to join your team, Facebook and LinkedIn groups also seem to be a popular place to advertise jobs. Sometimes this is far more productive than other forms of more expensive advertising. In the same way, if you're looking for a job, keep a look out for job adverts on the popular groups.

5. DON'T publish patient identifiable information

The latest guidance released by the General Dental Council (GDC),[3] which was effective from 27 June 2016, states that we should 'maintain and protect patients' information by not publishing any information that could identify them on social media without their explicit consent'. This is important to bear in mind if you are posting clinical photographs of your patients or discussing patient related information.

6. DON'T post anything that could affect the public's confidence in you as a dental professional

The latest guidance on social media from the GDC emphasises the importance of not posting any information, including personal views, or photographs and videos, which could damage public confidence in you as a dental professional. Posting information under another username does not guarantee your confidentiality. Even if you do not identify yourself as a dental professional, you must still follow the standards and this guidance when using social media.

If you're a practice principal or practice manager, it might be helpful to set out a social media policy for your staff to reinforce the above guidance. Within this, it may also be helpful to highlight the need to maintain appropriate boundaries in the relationships the dental team have with each other and their patients.

7. DON'T troll or cyber-bully

Standard 6.1.2 of the *Standards for the dental team* states: 'You must treat colleagues fairly and with respect, in all situations and all forms of interaction and communication'. The standards expected of dental professionals do not change because they are communicating through social media rather than face to face or by other traditional media. So as a dental professional we have a responsibility to behave professionally and responsibly both online and offline. We must treat colleagues fairly and with respect in all situations. We must not instigate or take part in any form of cyber bullying, intimidation, or use offensive language online. It can be tempting to think you are sheltered behind a screen when making defamatory comments, but realise you will be stepping out of the GDC's guidance and this could lead to serious repercussions. Furthermore, if you share any such content posted by someone else, you can still be held responsible even though you did not create it.

8. DON'T forget to check your security/privacy settings

You should regularly review your privacy settings for each of your social media accounts.

A recent addition to Facebook's trove of tools is a 'security checkup' that will guide you through a checklist aimed at making your account more secure. This includes logging out of Facebook on web browsers and apps you are not using, and receiving notifications or an email when someone attempts to log in to your account from an unfamiliar device or browser.

However, it is important to remember the limitations of these tools and realise that even the strictest privacy settings do not guarantee security. Ultimately, any information that you post is instantly made public. It can be easily accessed by others and can be copied and redistributed without you knowing. So presume that what you post online will be there permanently, even if you delete it afterwards.

'AS A DENTAL PROFESSIONAL WE HAVE A RESPONSIBILITY TO BEHAVE PROFESSIONALLY AND RESPONSIBLY BOTH ONLINE AND OFFLINE. TREAT COLLEAGUES FAIRLY AND WITH RESPECT.'

I hope the above is useful. We'd love to hear your comments or personal favourite social media tips, so feel free to share these on the *BDJ Team* Facebook page or Twitter feed!
www.facebook.com/bdjteam
https://twitter.com/Editorkate2

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bdjteam2016142

Dental hygienist trailblazer

BDJ Team editor Kate Quinlan interviews dental hygienist **Jo Kennedy**, 38, also known as The Sparkle Fairy. Jo has taken advantage of the recent change in rules over direct access to patients and launched her own mobile dental hygiene service.

Can you tell me a bit about your background?

I was born and raised in Bermondsey in Central London but now live in Surrey. I have been married for almost seven years and have a three-year-old daughter. We recently moved to Surrey as we wanted a life where we could just go out and have more freedom, trees and green space. When I go back into London - as my parents still live in Bermondsey - the thing that really gets me is how close all the buildings are. They're building flats on top of flats; when you look out your window you're looking into someone else's window. For the first time in my life, I now have a lovely garden, as previously I've always lived in a flat, so we're making the most of it.

Did you always want to work in dentistry?

When I was at school I wanted to be a primary school teacher or go into advertising so I did my A-levels to go in that direction. The first thing I realised was that I couldn't spell very well so becoming a primary school teacher wasn't really the best option. Unfortunately I was a child of the 80s and dyslexia wasn't really spoken about. Once when I was about 11, in history class, I remember writing down the name of a country and my teacher said to me, Jo is that really how you think you spell that word, and I said

The Sparkle Fairy

The Sparkle Fairy is a mobile dental hygienist business created by Jo Kennedy Dip Dh RCS (ENG). Jo offers oral hygiene services at people's homes or offices, for care home residents and for children, in London, Surrey and parts of the surrounding counties. They are divided into three appointment types: gum therapy, extensive gum therapy or periodontal therapy. **www.thesparklefairy.co.uk**

yes. But she just walked away and nothing was ever picked up. I remember all my tests always had big red lines across them and the words 'spellings, spellings' but nothing was ever picked up or investigated. So I really liked the idea of working in an office, or going into media, then I did some work experience on a magazine but hated every second of it. I came out of there and thought, 'What on earth am I going to do with my life?'

How did you get into dental nursing?

I did dental nursing as work experience as a teenager. I was terrified, really nervous, but absolutely loved it. I decided to give dental nursing a go while I thought about what I wanted to do next. I went back to the practice where I had done my work experience and they said if you want to do dental nursing, you need to do it correctly, go and train in a hospital. I was very lucky and got on the dental nursing course at Guy's and thoroughly enjoyed it.

Did you go straight into dental hygiene after that?

I loved being in the dental environment, but I also knew from a very early stage in my dental nursing course that I wanted more. I didn't want to work with someone else's patients, I wanted my own patients that believed and trusted in the quality of care that I would provide. And then I got talking to some of the hygienists and I thought yes, this is it, hygiene is what I want to do. For some reason at 19 I thought I was too old to be going to university and I didn't want to do five years to become a dentist. I thought academically I would be fine but had always struggled with my spelling so had no confidence. Looking back I probably could have coped with it, but for me hygiene was a better fit. I love perio and loved it even when I was nursing. I was very lucky. I called the Eastman and went for the interview and remember being with some very intelligent people and thinking I'm never going to get this, but I got a place and the rest is history. You can be the brightest person in the world but you have to be good with people. I am a talker, I love talking and engaging with people and I think I'm quite good at recognising people's personalities. I think as a hygienist - as any clinician - that's a major part of your job. Before the patient even sits in my chair, I need to work out what my patient is all about because that affects how you pitch your delivery of care to that person. I love my job and I love it even more now than when I first qualified.

Does anyone else in your family work in dentistry?

No. I'm the first person in my immediate family to go into further education. I had a lot of support from my parents who steered me in the right direction and encouraged me to follow my dreams.

Where you have worked since becoming a dental hygienist?

Where haven't I worked? Hospital, private practice, for BUPA in the corporate environment, and for a dental management company where we went in and helped practices boost their productivity and income. When I first came into the hygiene world I did a lot of locum but found it a bit demoralising. I have an ethos that I want to treat patients the way I like to be treated and going in to locum I wasn't doing that, it was a conveyor belt, scale polish scale polish. It wasn't me. Then I went to work in Chelsea and my boss there was great, he said 'Work how you want to work, if you want to do plaque and bleeding charts for every patient I trust you, if that's what you want to do'. It was amazing that he believed in my skills as a hygienist and knew that I was giving the patients the best possible care and it completely reignited my faith in dentistry. I am on a forum on Facebook and I see what other hygienists write on there and I think it's sad that some of them are turning away from hygiene, going back to nursing or changing careers completely because they're stuck in practices that want you in surgery for 20 minute appointments, scale polish scale polish. That's not a job in my eyes. It must be so testing and stressful when you can't give the care you want to give to your patients because you're rushing patients in and out of the surgery. That's not the dentistry that I want to give to my patients. At The Sparkle Fairy of course we definitely don't do that. We often go over our scheduled appointments at no extra cost if we feel the patient needs that extra care and reassurance, even travelling to appointments way out of our catchment area for those that desperately need access to primary dental care.

Did direct access inspire your decision to start your own business?

I've always wanted to do this. Fourteen years ago I knew of nail technicians and beauticians who went into people's homes and carried out different services and I felt like there must be a place for mobile dental hygiene. Not every patient can get to a dental surgery so there must be a whole raft of patients walking around dentally unfit because no one is getting to them. I spoke to my husband Andrew about it and he thought it was a great idea but he couldn't see how it would work having looked at the legalities behind it. Then when it was announced that the rules around direct access had been changed in 2013, I said to Andrew, 'This is it, this is what

I've been waiting for'. I'd just come back from maternity leave and my boss announced he was retiring, which broke my heart, and I felt like if we were ever going to do it, it would be now. We had some savings and we thought right, shall we buy a house or should we put it into a business. Hence, we're still renting!

Has it been very difficult to set up The Sparkle Fairy?

Yes, it has taken two years to get The Sparkle Fairy up and running, almost one of those years spent getting CQC clearance. It's not a quick process and there is an immense amount of work involved in setting up a dental practice.

A hygienist wrote to me a while back asking me to detail how I set the service up. I didn't respond because we run our business in a way that suits us and I can't tell someone how to start their own company, they need to work that out for themselves by studying what is involved in opening a practice and learning top to bottom how to manage and run a practice, but they also have to realise that's it's not just about picking up the scalers and going to somebody's house. To care for your patients and give them the care they deserve you need to make sure that every 't' is crossed and every 'i' is dotted because that is what they deserve, and the CQC require it. So the best thing to do is heavily research. One of the best ways is to use the CQC's key lines of enquiry which shows you what your practice must provide to patients.

'TRYING TO WORK OUT HOW TO CONDENSE A HYGIENE SURGERY INTO A VAN AND DECIDE WHAT TO TAKE WITH ME WAS REALLY DIFFICULT...'

Andrew spent months and months researching what we needed to buy and then once we got through all of that we went into the brainstorming phase, lots of trying to work out the logistics of how are we going to do this, how are we going to provide this service in a mobile surgery and it took a very, very long time.

Trying to work out how to condense a hygiene surgery into a van and decide what to take with me was really difficult. You really have to work it out for yourself and even if I look at what I'm doing now compared to six months ago, I do things differently. I'm a lot more streamlined and a lot more compact because I know what I need for each appointment and how to get it all back in the van in the quickest way possible to move onto the next appointment.

We ask a lot of our patients because we are asking them to trust us. A lot of patients contact us by email and that's the only contact we have with them before we turn up at their door, so it's really important for patients to be able to visit our website and see that we have CQC clearance, that I am registered with the GDC and they can see reviews from other patients to see the standard of service we provide. Having an article in the *Evening Standard Magazine* earlier this year was excellent because it gave people confidence to contact us, to see that this service exists and that it is authorised and regulated by the CQC. Our whole job is to deliver a service to patients that is safe, effective, caring, responsive to patient needs and well-led so we have invested in everything we need to make our service the best it can be.

How did you come up with the name?

Andrew wasn't keen on the name The Sparkle Fairy! But if you look at a lot of dental practice names they can put off patients. I wanted something a bit more approachable and light-hearted, as the dental practice is not portrayed as the most fun place to go. We just sat down and went through a lot of different names and ideas and after much deliberation The Sparkle Fairy was born.

Did you make the website?

I have to give a lot of credit to my husband. He is brilliant with computers and he created the website. He had the idea for the fairy logo on the website which we had made externally. Running the website is a job in itself and on top of that there is our social media presence. We don't have a traditional practice that patients walk past in the street so marketing online is really important and we try to look at new and exciting ways to raise awareness of our brand.

Did you leave your day job to start the business?

No, I still work in practice part-time. I have always been very open with my boss about what I'm doing; he teases me about it and says 'can you get your van out and we'll all jump in' but he knows exactly what I'm doing and he's happy about it. Caterham Dental Care is a lovely practice that really cares about its patients and I really enjoy working there and the people I work with.

I saw on your website that you offer a variety of services and packages. Have you added to these over time?

I have always wanted to make sure that we had, for a patient without any dental health issues, a 30 minute appointment, a longer appointment for those who need it and an hour appointment for those with periodontal disease for root planing. We have other services as well such as retirement home visits, bridal party visits etc and these have proven to be popular.

Can you outline a typical week?

Every week is different and busy, particularly since the *ES* article. It's good to be the trailblazer but the problem we have is no-one is looking for us at the moment, as we are the first private mobile hygienist service, so we are just getting our name out there and letting people know that this service exists and can help an immense

amount of people. We do have a few patients who have googled 'mobile dental hygienist' and found us and I always find those people fascinating. We do anything from 6.30/7 am appointments right through to 9 pm. It's a new business so we have chosen to do those hours, get ourselves out there and provide the service for our patients at times that suit them. I think I was a bit naïve at first. I didn't realise that starting my own business would be this hard, this time consuming, but I don't resent it, it's an amazing journey and every day we are helping to open up primary care dental services to those that need them the most.

Thursday mornings I dedicate to my daughter so we've had swimming and gymnastics this morning, had lunch then we'll drop her off to her grandma after this interview, then we have three appointments tonight. When it's your own business it's very difficult to have a cut-off point and not reply to patients and enquiries, whatever day or time. I have been known to be texting patients back at 10 pm on a Sunday night who are a bit anxious about their Monday morning appointment but I can't ignore them; I reply and put their mind at rest.

I see that you also offer tooth whitening on your website. Is it popular?

Tooth whitening is offered but is not that popular at the moment. I'm not much of a saleswoman to be honest. The reason we want to offer tooth whitening is because illegal tooth whitening really concerns me. It concerns me that people are going out there to use damaging products to whiten people's teeth, performing an act of dentistry when they are not qualified to do so. So I wanted to offer a safe, legal tooth whitening service that is done in the home. It's difficult because when you talk to people, they've heard about beauticians doing it for £50 and you're telling them it costs much more. When I've cleaned someone's teeth and they say they're interested in tooth whitening I say 'live with the teeth for a while now that I've cleaned them, and see how you feel'. I never want to bombard my patients with buy this, do this, but if they do want whitening they can request it and I will provide it if appropriate with the help of our dentist who applies the first application.

Do you sometimes have to advise patients to see a dentist?

Yes. For example recently I saw a young man of 29 who had never had anyone look in his mouth - I'll leave that to your imagination - and he had a lot of demineralisation going on in his mouth. So when I had finished with him I asked him to book in with a dentist and told him why he needed to see a dentist. Also, with a patient's permission, if necessary I write to their dentist to outline my findings. All of my patients receive a letter after I have seen them that outlines what I have done, what I have suggested that they need to do and when I need to see them again along with plaque and bleeding scores and/or a six point pocket chart so the patient can keep up with their care. Continuation of care is really important. I'm not taking patients away from dentists but I'm seeing patients who otherwise wouldn't see anyone and in turn encouraging/recommending that they do see a dentist, not just for the health of their teeth but for the health of their mouth, oral cancer screening and so on.

How did you get the word out about The Sparkle Fairy when you first launched?

When we first launched I used Facebook, loads of posts on our own profiles, then on local parent and other pages to get the word out there. We had CQC clearance in October and had a handful of patients shortly after that, mainly referred by friends. Then in January we really started marketing and using Google ads and many other marketing methods to get the business out there and things have really picked up.

Is it sometimes difficult to cope with demand?

It's starting to get that way as we don't really want to do weekends when we offer such long hours in the week. But I do book patients in for a Saturday morning if it's urgent and they can't do any other day. We try to accommodate everyone who wants an appointment and can usually deliver within a few weeks of contact, which is pretty good for dental hygiene appointments generally.

How does your husband find the time to travel around in The Sparkle Fairy van with you?

As a firefighter he does shift work so we work around when he's not doing a shift. I have to have someone with me who is trained in certain areas. I'm just lucky that I married a man that already has CRB checks and he is a trained first aider and he's on site as my chaperone.

Do you enjoy being on the road every day and meeting lots of different people?

I love it. It's so intimate: how you get to know your patient in a normal surgery is nothing like how I get to know my patients. I get to meet my patient's family, their pets, see which toys their children play with, what pictures they have in their front room. A lot of trust is involved as I'm going into their home and seeing personal things. They get my full attention so I have the time to chat if they want to and I'm not thinking about getting the next patient through the door as you might be in a practice.

I make the effort to eat healthily and take a packed lunch when I'm on the road as I can't live off fast food. If we're out in the evening I make sure we take food for the whole day prepared at home.

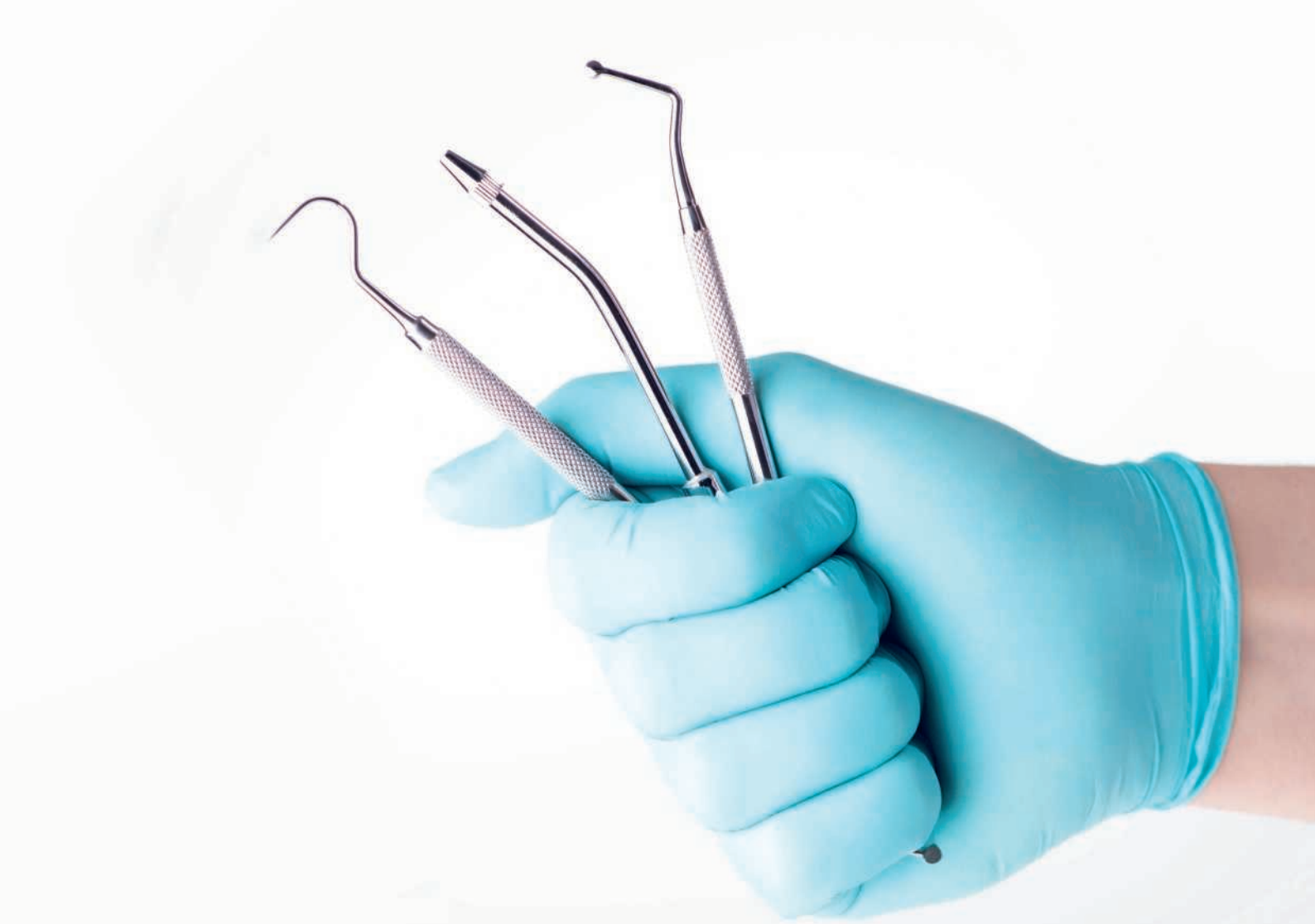
Do you have plans to expand in the future?

The dream long term is to expand and have a fleet of hygienists all over the country which will open up primary dental care to so many people who are currently unable to access it due to varying reasons, eg disabilities, time constraints, etc.

Would you encourage other DCPs to consider launching their own business?

Yes 100% I would. There are a lot of very driven, very caring and enthusiastic hygienists out there and it's hard to have the bravery to say 'actually, I can start my own practice', so it would be great for other hygienists to do it. Setting up my own business has been very challenging and time consuming but it is extremely rewarding in the sense that I have my own patient base that trust and believe in me to better their oral health. I'm looking forward to seeing what the future holds for The Sparkle Fairy and will continue to strive to open up our service to those that need it the most.

bdjteam2016143



Think patient safety: buy the genuine article

GDC action and a criminal conviction highlight the dangers of using counterfeit and non-compliant devices. The risks to you, your patients, colleagues and practice are very real.

As part of an industry-wide response to the issue the British Dental Industry Association (BDIA) operates the Counterfeit and Substandard Instruments and Devices Initiative (CSIDI).

CSIDI facilitates the reporting of those selling such products and promotes responsible purchasing throughout the dental supply chain.

The key is to get to know your suppliers.

BDIA members adhere to a strict Code of Practice giving you confidence that the products you purchase are of guaranteed quality and provenance.

Download the latest tips on how to spot fake dental products, find trusted dental suppliers or report anything suspect now at www.bdia.org.uk

BDIA CSIDI
COUNTERFEIT AND SUBSTANDARD
INSTRUMENTS AND DEVICES INITIATIVE

British Dental Industry Association, Mineral Lane, Chesham, Bucks HP5 1NL
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Image of counterfeit products confiscated by the MHRA.

Protecting your practice from fire

Dominic Slingsby[1] explains what dental practices need to consider when it comes to fire regulations and safety.

Fire regulations are a vital safety component in all workplaces but despite them being governed by stringent legislation, there are still lots of UK employers getting them wrong.

We provide a wide range of fire extinguishers, signage, alarms, fire buckets and blankets and regularly advise dental practices, as well as related businesses, about the products they require to maintain a safe working environment and stay on the right side of the law. This is covered by The Regulatory Reform (Fire Safety) Order 2005 in England and Wales, or The Fire Safety (Scotland) Regulations 2006. A key part of this legislation means employers must carry out regular fire safety risk assessments and take appropriate action to minimise risks. This should also take workers' capabilities into consideration along with specific risks they may face in their job roles.

Minimising fire risks

In workplaces with five or more employees, there needs to be a written risk assessment and it should pay specific attention to parts of the premises that could be particularly at risk of a fire. The risk assessment should address how fire risks are being minimised and highlight fire precautions that are in place to deal with relevant hazards. In addition, a plan should be created to deal with emergency situations and all employees should be made aware of evacuation procedures.

Generally it makes sense to nominate a responsible team member to oversee fire safety duties. Relevant training for them can also be very beneficial which might include general fire awareness and training in specific areas of fire safety such as carrying out risk assessments, fire warden duties and using fire extinguishers.

Workplace fires and escape routes

In 2013-14, there were 22,200 fires recorded in the UK in non-residential buildings and we've recently seen a number of high-profile fires hitting workplaces which have made a lot of organisations consider whether their own procedures and equipment are up to scratch. Ultimately, there are still work premises out there that fail to meet the required standard and a common issue is organisations that have reconfigured or expanded their buildings without making changes to their fire procedures.

Generally, all buildings must have adequate escape routes for their size and layout and clear signage should explain fire procedures and highlight exits. In premises where employees could be unaware of a fire, either because it's out of sight or they can't hear warnings from colleagues, suitable fire alarms should be installed. This can be particularly relevant in dental surgeries which are usually divided up into private treatment rooms and surgical areas, which creates lots of blind spots. Emergency lighting may also be necessary in very dark escape routes.

Fire extinguishers

Usually one water based extinguisher is required for each 200 m^2 of floor space, with a minimum of two extinguishers per floor. However, in large or more complex premises, and depending on individual risks, a greater number or wider range of extinguishers could be required. Some premises may also require hose reels and fire blankets to be installed.

It's also important to check that fire extinguishers on premises are relevant to the potential risks. Red, water filled extinguishers are the most common and are ideal for fires involving solid materials such as wood, paper and textiles etc. These should not be used with liquid fires such as oils and fats, electrical fires and fires involving flammable gases.

Blue extinguishers douse flames with dry powder and are good in areas where there could be multiple hazards that might include solid materials, liquid fires, flammable gas fires and some electrical fires. However, because the powder doesn't cool the fire in the same way that water does, fires can occasionally reignite if they haven't been put out properly.

Foam filled, cream coloured extinguishers are ideal for putting out solid materials and fires involving liquids. However, foam conducts electricity so it shouldn't be used on electrical fires or fires involving flammable gases.

Lastly, there are black, carbon dioxide filled extinguishers. These are good for fires involving liquids because it has a rapid smothering effect and leaves no residue. They can also be used on electrical fires and some small fires involving solid materials but they should never be used on fires where flammable gases are present.

Finally it's worth remembering that approximately 80% of workplace fires are put out using portable fire extinguishers so it's well worth offering specialist training to staff in the use of these.

bdjteam2016144

[1] *Dominic Slingsby is Operations Director at workplace equipment supplier Slingsby. Slingsby sells more than 35,000 products to workplaces across all sectors and has a large customer base within the dental industry www.slingsby.com*

Can the dental team shape dietary behaviour?

Dr Steven Lin[1] examines the expanding role of nutrition in oral healthcare.

Ask a member of the general public about the importance of oral health and you'll likely get an answer describing his or her general distaste for the dental chair. Amongst the stigma of drills and injections, dental appointments can often be seen as a chore rather than an integral part of overall health.

Are oral health messages too negative? Twenty-five percent of adults in the UK haven't visited the dentist in the last two years. Dentists could be seen as too quick to scorn for not brushing properly or eating too many sweets. In either case, the choice to avoid the dental checkup is a detriment to oral health.

So how can dental practices introduce more positive conversations around our teeth? For a start, there is a need for contemporary health messages to engage patients, instead of deterring them. Interestingly, a popular health topic in the media recently is the debate over the role of sugar in the chronic disease epidemic of obesity and type-2 diabetes.

Food, the language of humanity

There's no question people love food. Just take one look at the profiles of celebrities like Jamie Oliver and Gordon Ramsay and you'll see that food captures people's imagination.

Recently, cardiologist Aseem Malhotra has been heading calls in the media for a sugar tax and doctor Rangan Chatterjee has been featuring in his own show on the BBC outlining dietary approaches to medicine.

The dental industry has a history of trumpeting the cause of healthy eating. However, it took the popularity of TV Chef Jamie Oliver and his 'Sugar Rush' campaign to kick-start momentum towards a sugar tax in the UK.

'SUGAR IS A COMPLEX ISSUE WITH MANY DIFFERENT TYPES ADDED TO ALL LEVELS OF THE FOOD CHAIN. WHAT'S MORE IS IT APPEALS TO PEOPLE'S PRIMARY WEAKNESS FOR A SWEET SENSATION.'

For the oral health profession there is a long established relationship between sugar intake and tooth decay. However, there needs to be an expansion of the scope of nutrition in the dental practice in order to advance the awareness of the mouth as a primary contributor to an overall preventive health approach.

The documentary featured the alarming rate of childhood decay leading to hospital admissions. Despite long educating about the established sugar and tooth decay relationship, the dental profession is often misheard when echoing the importance of oral and systemic health.

[1] *Dr Steven Lin (www.drstevenlin.com) is a Sydney trained dentist, speaker and writer, currently working on his publication The Dental Diet. His two-day dental CPD course Nutrition and the Dental Practice will run on 14 and 15 October in Marble Arch, London. For tickets visit www.eventbrite.com.au/e/london-nutrition-the-dental-practice-tickets-26048855829.*

Why prevention begins with food

Dietary behaviour represents a fundamental aspect of the oral disease paradigm. While dental professionals can beg until blue in the face to get people to brush and floss, the reality is less than a quarter of adults in the UK use dental floss regularly. However, while people will refuse to brush twice a day, they'll certainly continue to eat three times a day and dietary intake will always have a significant impact on dental disease risk.

The increasingly common chronic diseases facing society today including obesity, type-2 diabetes and heart disease have all been heavily associated with lifestyle and diet. Similar to the sugar conversation, the dental profession was the first to communicate the correlation between diseases like periodontitis with heart disease and diabetes. However, remarkably absent from oral health practice is nutritional counsel that begins in the mouth with the aim to influence conditions all over the body.

The 'how to' guide for quitting sugar

Eliminating sugar is certainly one of the primary goals that any dietary guidance for oral health should adhere to. But how does it work in application? Most have heard of the recommendation to reduce sugar consumption due to the relationship between sugar consumption and tooth decay. However, instructing patients to 'decrease the amount and frequency of sugar' without further nutritional leadership fails to acknowledge the difficulty of reducing sugar in the modern diet.

Sugar is a complex issue with many different types added to all levels of the food chain. What's more is it appeals to people's primary weakness for a sweet sensation. The result is a high level of confusion amongst consumers about the amount of sugar in their daily intake and the application of reducing sugar from one's diet. The dental surgery needs to expand its awareness and support infrastructure that provides practicable steps for people to change their health through sugar reduction via dietary replacement programmes.

Gut health begins in the mouth

One of the hottest topics in healthcare today is the complex ro le of the human microbiome and 'gut health' in a variety of common diseases. Digestive disorders like IBS, Crohn's disease and ulcerative colitis are slowly being understood as imbalances in the microbes that live within the digestive system.

However, the influence of microbes is extending beyond disorders of the digestive system to include conditions like food and skin allergies, diabetes and obesity. The healthcare profession faces a formidable challenge to sift through the mind-boggling complexity of the human microbiome to apply treatments to disease.

Tooth decay as a disease has long been understood as a disease mediated by bacteria. However, the traditional approach has been primarily focused on the elimination of harmful bacteria. What the human microbiome project taught us is that bacteria play a role in both health and disease. The key is to balance the populations that live within the digestive system and prevent diseases that begin with microbial imbalance.

Dietary programmes that establish a healthy oral microbiome and prevent oral disease also encourage better gut health. The mouth-gut connection is one of the simplest, yet most exciting ways that people can influence health outcomes all over their body and it all begins with a simple dietary change that can be implemented in the dental practice.

Why dietary change needs a team approach

Nutritional programmes allow the flow of positive interaction between not only the dental team and patients but also better communication of oral health messages to the broader community.

'OUTSIDE THE TREATMENT ROOM, THE DENTAL TEAM CAN PROVIDE NUTRITIONAL SUPPORT IN THE FORM OF EDUCATIONAL SUPPORT, RECIPES OR JUST A CONVERSATION ABOUT MEAL IDEAS.'

For the dental practitioner, alongside diagnosis, it is imperative for lifestyle factors including food habits to be integrated into treatment communication. From here, dietary analysis can be performed by the practitioner and within a multi-disciplinary team that extends to a deeper understanding of disease risk and prevention.

However, expanding nutritional applications doesn't stop at the practitioner. Outside the treatment room, the dental team can provide nutritional support in the form of educational support, recipes or just a conversation about meal ideas.

With food in mind, the patient leaves the practice with a renewed impetuous to take control of their own oral health with a positive experience that will make sure they're calling back for their next dental appointment.

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CPD: ONE HOUR

Cannabis: a joint problem for patients and the dental team

By S. Joshi[1] and M. Ashley[1]

Cannabis is one of the most commonly abused drugs in the UK. The debate about its legality has grown in recent times but the health implication of cannabis use is an issue of today. It is a drug commonly described as being 'soft' but its use has profound effects on many of the body's systems, including the oral cavity. This is of particular importance to the dental clinician. This article aims to discuss the oral implications of cannabis use and provide advice on ways in which dental professionals can approach this sensitive topic and provide support.

INTRODUCTION

Cannabis is a plant-derived drug that has been used extensively worldwide since 500 AD and is one of the most commonly abused drugs across the globe.[1] It has been reported that approximately 147 million people (2.5%) worldwide use cannabis.

In England and Wales the most commonly used illegal drug is cannabis.[2] It is classified as a class B drug. Recent statistics show that approximately 6.7% of adults aged 16 to 59 used cannabis in 2014/2015, whereas 16.3% of young adults aged 16 to 24 used cannabis in the same period. Even though there has been a steady decline from 20062015, cannabis still appears to be a favoured drug amongst young adults aged 16 to 24.[2]

Cannabis is referred to by many different names but is commonly known as marijuana, hashish and hash oil. Its historic and current use extends from medicinal, recreational and religious purposes.[3] It is derived from a plant called *Cannabis sativa*, which is grown in varying climates but usually indoors. The drug itself is extracted through drying and pressing of the plant.[4]

There are many different preparation methods for cannabis, the most common being in the form of dried leaves and flower, which is referred to as marijuana. Marijuana is usually smoked in hand constructed cigarettes, known as 'joints'. It can also be smoked through a water pipe or vaporiser. Alternatively, the dried leaves and flowers are added to food and consumed to elicit intoxication.[4] Hashish, on the other hand, is formed into small light brown to black blocks, which consist of the resin extract from the flower head.[5] Hash oil, a more concentrated liquid is derived from hashish and is less commonly used.

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Delta9-tetrahydrocannabinol (THC)

Cannabis contains a total of 66 cannabinoids of which delta9-tetrahydrocannabinol (THC) has been identified to be the most potent. This is also mainly responsible for eliciting the psychoactive effects.[6]

THC has a mimicry action similar to a few endogenous compounds, namely Narachidonylethanolamide (anandamide) and 2arachidonoylglycerol (2AG).[7] Therefore, THC has a natural affinity for specific receptors found within the endocannabinoid system of the human body.

There are two types of cannabinoid receptors, CB1 and CB2 on which THC interacts to produce its effect. They are found in various locations but CB1 receptors are densely populated in the brain, whereas CB2 receptors are found in larger numbers on immune cells and other tissues such as the gastrointestinal tract.[8]

The concentration of THC within a given preparation of cannabis varies considerably.[9] The table below shows the average concentration of THC in three different preparations of cannabis.[10] It is clear that hashish oil, on average, contains six times as much THC than marijuana (Table 1).

Table 1 The average concentration of THC on three different preparations of cannabis

Cannabis form	Concentration (%)
Marijuana	9.6
Hashish	14.8
Hashish oil	66.4

Table 2 The difference between tobacco and cannabis

Cannabis joints are usually smoked for a longer period of time than tobacco.[4]
Cannabis joints are usually smoked to a shorter joint length, which results in a greater number of toxins entering the mouth.[4]
Cannabis has a higher combustion temperature compared to tobacco.[4]
There is greater carboxyhaemoglobin concentration and tar retention in lower airway in cannabis smokers.[4]
Tobacco found in cigarettes is regulated. Cannabis is a non-regulated substance.
Tobacco is usually smoked more frequently than cannabis due to the shorter half life of nicotine.[4]

Route of administration

Cannabis is most commonly smoked in 'joints'; this rapidly administers the cannabinoid THC.[6] During the smoking process, approximately 50% of the available THC is inhaled whilst the remainder is lost as heat or smoke.[3] The effects of THC are apparent within minutes and usually diminish after 2-3 hours.[11] After the experienced effects THC remains present within adipose tissue for approximately 30 days while it is slowly released back into the body.[11]

Alternatively, cannabinoids in cannabis can be inhaled through water pipes and vaporisers. Vaporisers have become a growing trend and questions have been raised as to whether its use can be a less harmful mode of intoxication. Many vaporisers work via the passage of hot air through the dried cannabis thus causing the active components such as THC to essentially vaporise and become inhaled.[3] Despite limited studies having been conducted on these forms of inhalation techniques, recent studies have found that vaporisers were shown to reduce toxins compared with cannabis 'joint smoking'.[12] Conversely, other studies have found that there may be some detrimental effects of vaporising cannabis such as a significant production of neurotoxic ammonia.[12]

The ingestion of cannabis with foods is another route of administration, but the onset of the psychoactive effects are usually delayed by 1-3 hours.[1] This is primarily due to the longer absorption process via the gastrointestinal tract. Therefore, the onset time is highly unpredictable and the duration of action has been found to be considerably prolonged.[5,13]

New psychoactive substances

A growing concern for many is the emerging trend of new psychoactive substances (NPS) also referred to as 'legal highs', 'designer drugs' and 'club drugs'. These substances are not regulated and may appear safe due to the loosely attached term 'legal' but a number of these drugs have been found to be controlled substances.[14]

These synthetic psychoactive drugs have many similarities in their chemical structure, but not identical, to the drug they attempt to mimic. Therefore, they aim to produce a similar effect on the user. NPS can be defined to 'stimulate or depress the CNS, or cause a state of dependence, have a comparable level of potential harm to internationally controlled drugs; and are newly available rather than newly invented'.[15]

Synthetic cannabinoids are intentionally modified variants of the cannabinoids found in cannabis. They are sprayed onto plant material and have previously been marketed as 'K2' and 'Spice'. The compounds interact with the same CB1 and CB2 receptors that THC interacts with but some of these substances are much more potent than THC and their effects on the body are hugely unpredictable.[16]

The manipulation of compounds to avoid the law has created a situation which poses new and rapidly changing challenges for the Department of Health and other sectors within the UK. The acute and chronic psychological and general effects of these NPS are unclear and strategies to tackle this growing problem are being reviewed.

General effects of cannabis use

Cannabis use affects multiple bodily systems, some more profoundly such as the respiratory, cardiovascular and the central nervous system. Its effects vary considerably between individuals, and also depend on the preparation and the mode of intoxication.[17]

Cardiovascular system

The THC found in cannabis has shown to consistently increase the heart rate, during the initial period of cannabis use, through the inhibition of vagal stimulation via interactions with neurotransmitters such as acetylecholine.[3,17] In contrast, bradycardia may be induced in some regular cannabis users further emphasising the complex effect of THC on the body.[17]

Respiratory system

Cannabis use, like tobacco smoking, has a significant impact on the respiratory system. There have been studies which describe the similarities in carcinogenic chemicals between cannabis and tobacoo.[18] However, there are many differences, some of which are shown in Table 2.

Oral impact of cannabis use

The combined use of cannabis and tobacco, which is common amongst users, poses challenges for researchers who are interested in identifying the effects of cannabis alone. Using the available evidence the effects of cannabis on oral health will be discussed.

Dry mouth and caries

Saliva is commonly known to protect the underlying mucosa from frictional damage. It is also an excellent buffering system involved in protecting the oral cavity, especially the teeth, from dental diseases such as caries.

A study carried out by Schulz-Katterback[10] aimed to assess the implications of cannabis use and the risk of developing dental caries. A sample size of 85 participants were used and divided into two groups. The control group were tobacco smokers only and the test group used cannabis and tobacco. Each participant was asked a series of questions regarding their diet, attitudes and behaviour towards dental care. The results obtained showed that cannabis users brushed their teeth less frequently than the control group. In addition, the control group visited their dentist more regularly whereas only 21% in the test group visited their dentist annually.

This study also established that cannabis users generally experienced dry mouth for approximately 16 hours after the use of cannabis. A study conducted by Darling *et al.*[19] which aimed to determine the oral effects of cannabis found that dry mouth was experienced by 69.6% of its participants after smoking cannabis, compared to 18.6% of the cigarette smoking control group.[19] Moreover, the effects of dry mouth commenced immediately after the use of cannabis and the duration of the effects were variable between participants.

In contrast, Di Cugno *et al.*[20] found from their study of 198 young adult participants, that cannabis did cause a decrease in parotid saliva flow rate, but this was statistically insignificant as the cannabis using participants also used amphetamines and none used cannabis alone. Interestingly, the results did reveal that the pH of the test group was 6.90, whereas the pH of the control group was 7.51.[20] These findings would suggest that a person who uses cannabis has a reduced saliva buffering capacity than someone who does not use cannabis. The study provides some information about the effects of cannabis on the oral environment, but the reliability of the results can be questioned due to presence of confounding factors such as the concurrent use of other recreational drugs.

Through the effect of cannabis on leptin, an important hormone in regulating appetite, a cannabis user is frequently hungry immediately after cannabis consumption.[17] The combination of reduced saliva production, decrease in saliva pH and increased appetite can leave teeth vulnerable to attack from potentially cariogenic foods and drinks. A survey carried out by Schultz-Katterbach[10] of his participants regarding their diet found that 63% of those who felt hungry post cannabis use had consumed foods and drinks categorised as being sweet.

The study by Schulz-Katterbach[10] found that through a combination of poor oral hygiene, less frequent dental visits and high cariogenic diets after cannabis use led to frequent identification of carious lesions, particularly on smooth surfaces. The test group had approximately six times as many decayed surfaces compared to the control group.[10] Caries on smooth surfaces usually indicates poor plaque control as these surfaces are easily cleanable (Fig. 1).

A study carried out by Silverstein[21] supports Schulz-Katterbach[10] findings. The DMFT score of 77 subjects who had used recreational drugs was investigated. It is not surprising that 84% of the participants used cannabis. The DMFT score for cannabis users was 11.99, of which decayed teeth equated to 22% of the DMFT score. Similarly, Di Cugno *et al.*[20] found the number of decayed teeth amongst cannabis users to be 2.5 times higher than that of controls, which made the overall DMFT index in their study statistically significant. Even though these studies have been conducted over 30 years ago, their findings highlight the oral health status of cannabis users. Further studies are required to look specifically at the DMFT value of cannabis users today, whilst limiting the number of confounding factors.

Soft tissue diseases

Many drugs such as alcohol and tobacco have a direct effect on the soft tissues of the oral cavity and these are also commonly used by cannabis consumers.[22] However, cannabis has been found to also have a detrimental impact on the oral soft tissues.

Periodontal disease has been found to affect cannabis users. This could be closely associated with the xerostomic effect and the subsequent accumulation of plaque and calculus as a result of poor plaque control.[22] Saliva plays an important role in protecting the periodontal tissues. Its reduction caused by inhibitory mechanisms activated by cannabis can have damaging consequences. Gingival enlargement has also been seen to affect heavy cannabis users.[19] In addition, Darling *et al.*[19] also found 'painful fiery red gingivitis' and alveolar bone loss in heavy cannabis users.

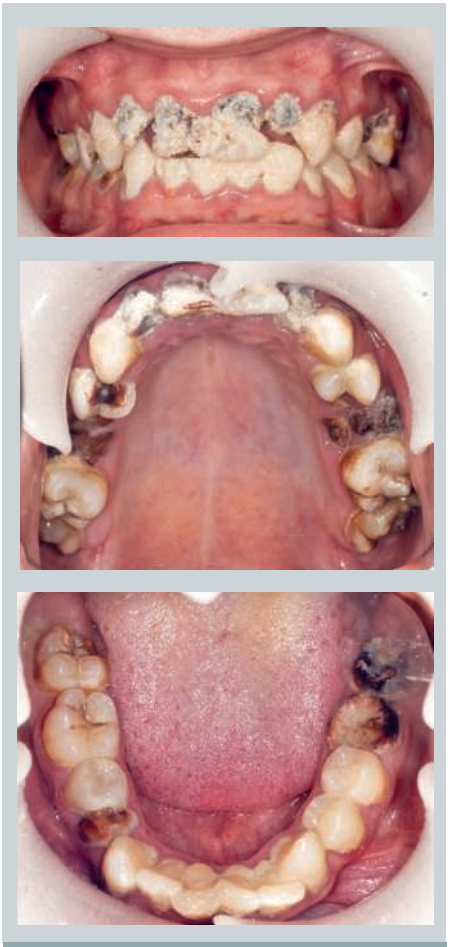

Fig. 1 The oral presentation of a 22-year-old patient who smoked six cannabis 'joints' a day for the last eight years. Extensive caries present affecting multiple surfaces of numerous teeth. In addition, gross accumulation of plaque and calculus visible with inflammation of the gingivae

It is clear that cannabis has a higher combustion temperature than tobacco and therefore, one would expect that a user is at greater risk of thermal injuries to the oral soft tissues. However, the evidence from the studies available has not conclusively stated that particular soft tissue injuries have been identified as a result of cannabis use. Nonetheless, chronic thermal injury could cause hyperkeratosis of the oral mucosa.[10] The frequency, duration and mode of intoxication of cannabis would possibly have an effect on the degree of thermal injury to the oral soft tissues.

Darling *et al.*[19] found the prevalence of leukoedema amongst participants was significantly higher in cannabis and tobacco smokers when compared to non-smokers. Leukoedema is a 'bilateral, diffuse, translucent greyish thickening, particularly of the buccal mucosa'.[23] It has been described as a variation of normal, which is more common in Afro-Caribbean individuals. The presence of

leukoedema may be caused by many factors such as genetics, tobacco and cannabis smoking along with alcohol and other irritants.[19]

The association between candida and tobacco smoking has been known for many years. Therefore, a possible association between cannabis smoking and candida may also be present. A separate study conducted by Darling *et al.*[24] showed that there was an increased prevalence of candida amongst cannabis users. The immunosuppressive effect of THC via the CB2 receptors found on immune cells could potentially allow opportunistic infections, such as candida to proliferate and become clinically evident. A holistic approach must always be taken when assessing patients, as there are many other immunosuppressive drugs and diseases that could also cause conditions associated with candida. Darling *et al.*[24] described the following:

- Increased density of candida seen in cannabis users when compared to tobacco smokers and non-smokers
- A combination of poor denture hygiene, deficient nutritional intake and cannabis use can contribute to the manifestation of candida
- Certain candidal species can utilise components of cannabis such as hydrocarbons to produce energy, which can be used for reproduction.

Cannabis and oral cancer

Cannabis, like tobacco, contains an array of carcinogens including 'phenols, nitrosamines, vinyl chloride and various polycyclic aromatic hydrocarbons'.[25] The quantity of tar inhaled and retained in the lower respiratory tract has been shown to be higher in cannabis smokers in comparison to tobacco smokers.[26] Another difference between tobacco smoke and cannabis smoke is that cannabis smoke contains 50% more of the carcinogenic hydrocarbons.[27] It is well known that there are many risk factors for oral cancer, some of which include the use of alcohol and tobacco. The combined use of both alcohol and tobacco significantly increases the risk of developing oral cancer. However, the role of cannabis in being a risk factor of oral cancer is unclear.

A case-controlled study conducted by Zhang *et al.*[28] found an increased risk of head and neck cancer amongst cannabis users. This had a dose dependent relationship even after adjusting for possible confounding factors. Similarly, a study carried out by Hashibe *et al.*[26] also found a positive dose dependent relationship between cannabis use and oral and laryngeal cancer. However, this relationship was no longer observed once confounding factors such as cigarette smoking were adjusted for. Caplan *et al.*[29] described two cases where both individuals who regularly smoked cannabis, but had no past history of cigarette smoking or alcohol drinking, were found to have squamous cell carcinoma of the tongue. Dahlstrom *et al.*[30] conducted a study of 172 never smoker-never drinker (NSND) participants who were newly diagnosed with squamous cell carcinoma of the head and neck (SSCHN). Eleven percent of this group had regularly used 'non-cigarette tobacco or marijuana'. It was concluded that there was an increased identification of SSCHN of the oral tongue amongst NSND, but no single aetiological factor could be responsible for these findings.

In contrast, a study carried out by Rosenblatt *et al.*[31] found no association between cannabis use and oral cancer. In support, another two studies carried out by Llewellyn *et al.*,[32,33] which involved the analysis of 53 cases in one study and 116 cases in another, found there to be no increased risk of oral cancer amongst regular cannabis smokers. It is clear that the results of the different studies are conflicting and this could be due to differing methodology of their studies. Moreover, participants are more prone to under report the amount of cannabis used due to its illegal status.

The concurrent intake of alcohol, tobacco and possibly other social drugs makes it difficult to be certain if cannabis alone is a risk factor for oral cancer. In order to reach a firm conclusion, rigorous clinical trials with robust methods would be required. Hashibe *et al.*[26] outlines recommendations for future research which states that the amount of cannabis used by a participant should be clearly quantified, the mode of intoxication established and to conduct research projects in countries where cannabis is not illegal. This would allow more accurate and reliable results to be obtained. Uncertainty surrounding the possible link between cannabis use and oral cancer still remains, but a possible association should not

'IT IS IN THE PATIENT'S BEST INTEREST THAT RECREATIONAL HABITS ARE UNCOVERED AND BRIEFLY DISCUSSED SO THAT PATIENTS CAN BE DIRECTED TOWARDS SUPPORT'

Table 3 A summary of the oral implications of cannabis use

Oral implications of cannabis use	Associated implications
Dry mouth (xerostomia) - short term	Increased risk of caries Increased risk of periodontal disease Increased risk of frictional injuries Halitosis
Thermal injury	Hyperkeratinisation due to higher combustion temperature of cannabis
Leukoedema	Normal variation Clinically detectable due to multifactorial reasons: genetics, alcohol, tobacco and cannabis use
Candidal infection	Increased risk of candidal infection – poor oral hygiene/ denture hygiene –nutritional deficiency
Oral cancer	Cannabis contains similar carcinogens to tobacco. Possibility of a link with cannabis use. However, more evidence required.

be disregarded. Table 3 summarises the oral implications of cannabis use.

How can recreational habits be uncovered?

As a health care professional it can be very challenging and daunting to discuss a patient's recreational habit. This is primarily due to the illegal nature of many recreational drugs and patients' reluctance to reveal their habits. It is in the patient's best interest that recreational habits such as cannabis use are uncovered and briefly discussed so that patients can be directed towards appropriate care and support.

There are no fixed criteria or guidance documents available which clearly state how one can approach the topic of cannabis use. However, it is clear that a set formulated approach will not prove successful with all patients and therefore flexibility is required.

In order to open an avenue for discussion, medical history forms can be adjusted, to contain a section where patients can simply tick a box if they have either never used, previously used or currently use recreational substances. Hashibe *et al.*[26] found that participants in their study were more susceptible to underreporting their cannabis use when asked face-to-face than if they were asked through a questionnaire. A well laid out questionnaire will appear general, standardised and not targeted specifically at certain patients. Some patients may not initially disclose any recreational substance use until they feel more confident in the dentist and able to trust them with the information. This exemplifies how important it is to be flexible in the approach when gathering information.

What advice can I give once a recreational habit has been uncovered?

It is important as a dental professional to acknowledge in a non-judgemental manner that a patient has disclosed sensitive information about their life regarding the use of a controlled substance. Patients should be made aware that all information provided and discussed will remain confidential and any information will only be shared out with the patient's informed consent. This would instil deeper trust in the patient as they may be more likely to be open about their habits.

The framework provided in section 7 in the *Delivering better oral health*[34] document regarding smoking and tobacco use is an excellent structure which could be used with cannabis consumers. The format of 'Ask, Advice and Act' could be used to give 'very brief advice' on the use of cannabis. It is crucial that patients are not immediately warned about the dangers of cannabis use as this could 'create a defensive reaction and raise anxiety levels'.[34] This could potentially create barriers between the dental clinician and the patient.

It is best to leave the discussion towards a dedicated period in the consultation where the patient can be educated on the effects of cannabis on oral health. During the 'very brief advice' period, it is essential that the patient's motivation to stop using cannabis is gauged and the subsequent advice tailored to their desire to quit. It is well known that habits are best broken and cessation achieved via appropriate support throughout the process. An engaging and motivated patient should be directed to their general medical practitioner, local community NHS Stop Smoking Services[35,36] and/or Talk to Frank.[37] The use of leaflets, which are available from Talk to Frank, can be a very useful tool in conveying concise information to patients.

The patient should be educated on the importance of prevention of dental diseases through improved oral hygiene techniques and regimes, but also on the benefits of fluoride. Furthermore, the patient's diet should be investigated and appropriate advice should be given in reducing the amount of sugary foods and drinks and to consider healthier alternative substitutes.

'IT IS IMPORTANT AS A DENTAL PROFESSIONAL TO ACKNOWLEDGE IN A NON-JUDGEMENTAL MANNER THAT A PATIENT HAS DISCLOSED SENSITIVE INFORMATION'

Once a patient has been directed, what can they expect?

There is an abundance of useful information available on NHS Stop Smoking[35,36] and Talk to Frank[37] websites regarding many drugs including cannabis. These websites, which are regularly updated, provide a great tool for both patients and the dental professional. Talk to Frank is a dedicated organisation that is available to be contacted at any time and provide advice. Patients who use recreational drugs should be strongly advised to visit their website.

In brief, Talk to Frank advises cannabis users who are attempting to give up, to identify reasons and trigger factors for using cannabis. Once these have been established, diversions should be put in place to avoid the trigger factors. An action plan should be devised which states a clear stop date. In addition, a strong supportive network of family, friends and professionals at Talk to Frank should be present and available to provide encouragement at all times. The journey is understandably difficult and withdrawal symptoms may be experienced such as irritation, anxiety, anger, craving for cannabis and sleeplessness. However, these symptoms will eventually subside. During this period it is advised that nutritious meals are regularly eaten and exercise is carried out to help minimise the potential withdrawal symptoms.

Conclusion

Cannabis is a very common recreational drug used around the world. The challenges faced by healthcare professionals are increasing with the growing use of NPS. There is evidence to show that cannabis has a negative effect on oral health, however, further studies are required with reduced confounding factors in order to show more accurate findings.

As dental professionals we are likely to encounter cannabis users frequently throughout our working career. Therefore, one must be prepared and confident in discussing the effects of cannabis use on oral and general health and be able to either provide or direct towards a holistic support programme which addresses the social habits.

The complexity of unravelling the specific effects of cannabis on an individual is extremely challenging, as discussed earlier, but it can be said with certainty that cannabis use does have an impact on oral health. This paper has aimed to enhance the dental professional's armamentarium with regards to knowledge on cannabis and its general and oral effects, along with ways to uncover a recreational habit and give advice to patients.

Since this article was accepted for publication, the Psychoactive Substances Act has been introduced into UK legislation on 26 May 2016. This makes it illegal to produce, supply and possess psychoactive substances.

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Three steps to a **healthy mouth**

This article presents the evidence supporting the use of a three-step home care regimen to maintain good oral health. Brought to you by Johnson & Johnson, the makers of LISTERINE.

We know that preventive oral care has existed in a variety of forms for thousands of years.[1] Barnett (2006) tells us that: 'The variety of mechanical implements, potions and dental procedures used through the centuries attests to the importance attributed to oral cleanliness and the recognition that deposits of food debris and bacteria can in some way have a detrimental effect on oral health. Nevertheless, the mechanisms by which the deposits can result in disease were not really appreciated until the late nineteenth century, when Dr W.D. Miller proposed a key role for acid-producing oral bacteria in the aetiology of dental caries. From this, the concept of preventive dentistry developed.'[1]

Fast-forward to the twenty-first century and advances in preventive dentistry have led to further knowledge that twice-daily brushing and interdental cleaning are essential in achieving and maintaining oral hygiene.[2] They displace and dislodge plaque bacteria that can cause gingivitis and periodontal disease from the tooth surface.[1]

However, we also know that, for a number of reasons, brushing and interdental cleaning are insufficient for the majority of the population to eliminate plaque bioflim.[2,3] This is supported by the data published in the most recent Adult Dental Health Survey (2009): despite 75% of dentate adults surveyed claiming to brush their teeth at least twice a day and 25% of those reporting they also floss daily, 66% had visible plaque.[3]

All of this suggests that there remains an unmet need when it comes to implementing an effective home care regimen between check-up and hygiene appointments.

An adjunctive third step

Barnett (2006) suggested that this gap in preventive care provides: '[…] a clear rationale for incorporating effective antimicrobial measures, such as use of an antimicrobial mouthrinse, into daily oral hygiene regimens.'[1]

Looking at the issue from both individual health and general public health perspectives, he also considered that using an antimicrobial mouthrinse on a daily basis would have a significant effect on plaque control, making it a cost-effective and significant adjunct to mechanical cleaning.[1]

Barnett (2006) further wrote that the rationale for using an antimicrobial mouthrinse is two-fold:

1. Since mechanical methods performed by the majority of people is inadequate, an adjunctive antimicrobial mouthrinse may help to reduce plaque levels[1]
2. It offers a way to deliver antimicrobial agents to mucosal sites throughout the mouth that are unaffected by mechanical methods and would otherwise serve as 'reservoirs' for plaque bacteria.[1]

Supporting evidence

This concept has been further investigated by various researchers in the last ten years. For example, in 2014 Charles and colleagues sought to determine the ability to achieve gingival health in the short-term with daily rinsing with an essential oil containing antimicrobial mouthrinse.[4]

They concluded: 'Significantly more healthy gingival sites and virtually plaque free tooth surfaces can be achieved as early as four weeks with use of an essential oil antimicrobial mouthrinse. This finding continues through six months twice daily use as part of oral care practices compared to mechanical oral hygiene alone.'[4]

This is supported by Boyle and colleagues (2014), who demonstrated that quantitative assessment of data exploring mouthwash use and the risk of common oral conditions supports the use of mouthwash in preventing dental plaque, exploring the differences between chlorhexidine, cetylpyridinium and essential oils.[5]

They came to the conclusion that when a mouthwash is used for fewer than three months, those containing chlorhexidine are the most effective of the preparations they considered.[5] However, when used for six months or longer, essential oil mouthwashes were shown to equal or exceed the effect of chlorhexidine in controlling plaque as an adjunct to standard care.[5] It was also found that mouthwashes containing cetylpyridinium may also be effective, but less so than chlorhexidine and essential oil formulations.[5]

In 2015, Chapple and colleagues reported on the consensus views of Working Group 2 of the 11th European Workshop in Periodontology.[6] They related that:

- 'There is a universal recommendation to brush twice daily for at least two minutes with a fluoridated dentifrice. For periodontitis patients, two minutes is likely to be insufficient.'[6]
- 'Daily interdental cleaning is strongly recommended to reduce plaque and gingival inflammation.'[6]
- 'In patients with gingivitis, the adjunctive use of chemical agents for plaque control offers advantages.'[6]

They further concluded that, '…where improvements in plaque control are required, adjunctive use of antiplaque chemical agents may be considered. In this scenario, mouth rinses may offer greater efficacy but require an additional action to the mechanical oral hygiene regime.'[6]

It would seem therefore that there is a case to be made for the use of an effective antimicrobial mouthrinse as an adjunct to mechanical cleaning. Furthering the supporting evidence is Araujo and colleagues' (2015) meta-analysis.[7]

As the first meta-analysis to make use of long-term clinical data incorporating responder analysis* of both published and unpublished results of the benefits of using an essential oil-containing mouthrinse alongside brushing and interdental cleaning to reduce dental plaque bacteria, the conclusions they reached are significant.[7]

'THE HYDRODYNAMIC ABILITY OF A MOUTHWASH ALLOWS IT TO REACH ALL FIVE EXPOSED TOOTH SURFACES'

They were able to show the oral health benefits of using an essential oil-containing mouthrinse as an adjunct to mechanical cleaning.[7] Responder curves** plotted by the authors show that a mean average of 36.9% subjects using mechanical methods with an essential oil mouthrinses experienced at least 50% plaque-free sites after six months compared to just 5.5% of patients using mechanical methods alone.[7]

Summarising the results, Araujo and colleagues (2015) were able to provide strong evidence that there are statistically significant greater odds of patients achieving a '…cleaner […] mouth, which may lead to prevention of disease progression…' if patients add an essential oil mouthrinse to their daily mechanical cleaning regimen at home.[7]

Accessing preventive care

In terms of preventive care, it has been put forward that dental plaque, the main cause of oral disease, can be removed through the mechanical means of brushing and interdental cleaning.[5] However, it has also been suggested that a significant amount of plaque remains on the teeth even following the implementation of such a regimen, while the soft tissues remain largely untouched.[5]

Since mechanical cleaning alone is therefore insufficient, this indicates that there remains an unmet need.[5] To this end, it has been suggested that a chemotherapeutic mouthrinse – such as one containing essential oils – offers a considerable advantage when used as an adjunct to mechanical cleaning, as it, '...can reach virtually all residual plaque…'[5]

Indeed, the hydrodynamic ability of a mouthwash allows it to reach all five exposed tooth surfaces, so, given the scientific evidence supporting its efficacy, for most patients it is a logical long-term adjunct to a daily preventive regimen.

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* The responder analysis approach used here presents the percentage of subjects over the whole range of possible cut-off points in a visual manner, enabling dental healthcare professionals to compare treatment groups at any response level that is valid for their patients.[7]

** Responder curves plot the proportion of participants within each treatment group achieving at least the given percentage of healthy sites, for all possible percentages of healthy sites (0-100%).[7]

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CPD questions September 2016

Cannabis: a joint problem for patients and the dental team

1. With which of the following would you **disagree**?

A) THC is the most potent of the cannabinoids
B) there are two types of cannabinoid receptors: CB1 and CB12
C) CB1 receptors are concentrated in the brain
D) Vaporising cannabis has been shown to produce neurotoxic ammonia

2. Which answer would you consider **correct**? A study on the effect of cannabis on a group of young adult participants found:

A) a positive correlation of smoking with the release of leptin
B) that the results were statistically significant
C) none used cannabis alone
D) the pH of their saliva was higher than the control group

3. Leukoedema is a _____, _____, translucent _____thickening particularly of the _____ mucosa.

A) unilateral, diffuse, greyish, sublingual
B) bilateral, concentrated, greyish, buccal
C) bilateral, diffuse, greyish, buccal
D) bilateral, diffuse, white, sublingual

4. Which of the following is **not** supported in this article?

A) cannabis smoke contains 50% more carcinogenic hydrocarbons than tobacco smoke
B) the quantity of tar inhaled is greater in cannabis smokers than tobacco smokers.
C) candida density is increased in cannabis smokers when compared to tobacco and non-smokers
D) cannabis is an established risk for oral cancer

BDJ Team CPD

CPD: ONE HOUR

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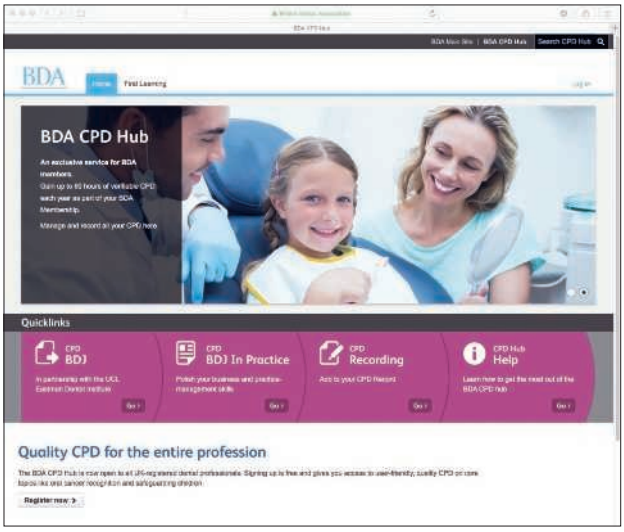

With best wishes

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