DENTAL HEALTH

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The mission of BSDHT is to represent the interests of members and to provide a consultative body for public and private organisations on all matters relating to dental hygiene and therapy. We aim to work with other professional and regulatory groups to provide the highest level of information to our members as well as to the general public. The Society seeks to increase the range of benefits offered to members and to support this with a clear business and financial strategy. The Society will continue to work to increase membership for the benefit of the profession.

BRITISH SOCIETY OF DENTAL HYGIENE AND THERAPY
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EDITORIAL

Covid-19: Where are we now?

Today, I passed the racks of laundered re-usable gowns and the named boxes of fit-tested FFP3 respirators and cannot quite believe that we were forced to wear all this until just over a year ago. The restrictions placed on practising dental professionals were, to say the least, onerous in the extreme, with possibly undue emphasis on AGPs and their alleged danger.

The following is a quote from the May 22 guidance for dental professionals, issued where I work in Wales:

"Novel Coronavirus, SARs-CoV-2 (C-19) is a highly infectious respiratory borne virus. For most patients, the symptoms are mild, and many may be asymptomatic. The onset of symptoms after exposure (incubation time) to C-19 is currently estimated at between one and fourteen days.[1] Patients may be infectious for one to two days before the onset of symptoms, they may be most infectious when they are symptomatic."[2]

This sounds very similar to most winter viruses including colds and flu and, even though Covid-19 is still regularly cropping up, the three are almost interchangeable in terms of presentation, except that flu seems to be the most disabling. Why then is Covid-19 still classed as a notifiable disease (but only if you are a GP, hospital doctor or microbiologist as, once again, the dental profession is not treated as part of the healthcare team and we are neither required nor given the access to the systems to enable reporting)?

The current guidance for non-healthcare workers is that they should stay at home (if possible) for five days once a positive diagnosis, by for example a lateral flow test, is confirmed. It is no longer compulsory to self-isolate - unlike in China where until very recently, sufferers were transported to isolation camps - and advice is given about how to minimise the risk to others if you do go out. It is interesting to note how the use of face-masks in the public arena has continued to decline, more so than it did in Hong Kong and Japan following the original SARS outbreak. Even the Perspex screens in my local supermarket have been taken down. The guidance for those of us in healthcare is less clear and we have to fall back on earlier guidance, some of it still draconian, if we, or one of our colleagues, test positive.

There is, of course, a fundamental duty of care that rests with us, to do no harm to patients in our care, but with huge backlogs in the delivery of primary (and secondary) care dentistry is it reasonable to close our facilities again if a receptionist (working behind a Perspex screen) contracts a non-disabling form of Covid?

It would be wonderful if the respective chief dental officers could come up with realistic and sensible guidelines for practices to continue their attempts to provide the backlog of care that our patients so desperately need. Writing this on the run-up to Christmas I think I just saw some pigs-in-blankets performing aerial acrobatics!

References

1. Infection prevention and control in the context of coronavirus disease (COVID-19): A living guideline. WHO (7 March 2022) https://www.who.int/publications/i/item/WHO-2019-nCoV- ipc-guideline-2022.1
2. Dental management for respiratory transmitted illnesses (Including COVID-19) in Wales May 2022 (this replaces previous guidance). https://gov.wales/dental-management-patients-during-covid-19-recovery

Heather Lewis

FROM THE PRESIDENT

At the time of writing, it is just one week since I travelled home from the OHC, and what a fantastic couple of days that was. This last week has gone by in a blur and now I sit and consider that it is not only the turning of the year from 2022 to 2023, but also the start of another cycle, that of Diane Rochford completing her tenure as President of BSDHT and of me starting mine.

It was such a delight seeing so many people at the OHC in Manchester, almost a third more delegates joined us this year compared to last, and the buzz and excitement about the place was palpable. The trade exhibition hall was busy, and they were delighted with the interaction with delegates. The speaker and hands-on workshop sessions were well attended, and the whole event ran smoothly with thanks to the conference organisers Profile Productions, and the hard-working BSDHT teams.

Prior to the OHC, we held our bi-monthly Executive team meeting where we welcomed Simone Ruzario into the post of honorary treasurer and Rhiannon Jones as our new president elect. My thanks go to Laura McClune who served as honorary treasurer for the last two years. We all wish her well in her next adventures. I would also like to thank Diane Rochford for her kind and forward-thinking mentorship and leadership over the last two years. I will carry forward those projects and ideals that Diane initiated.

Consultations

There are two government consultations currently open to which BSDHT will formulate a response: *'GDC consultation on Interim Orders Committee Guidance and associated information', which closes 2 February 2023; and 'GDC consultation on updated learning outcomes and behaviour expectations in dental education',* which closes 10th January 2023. If any member would like to respond personally, then please do.

Further to a consultation from earlier in 2022, there will be changes around the registration of dentist colleagues from overseas. These changes will be implemented from early 2023, the main change being that dental professionals who qualified from overseas, who hold a qualification in dentistry, will no longer be able to join the GDC register under a DCP title.

The GDC is certainly trying to engage with the dental stakeholders and appears open to listening to our views. Diane and I attended the GDC's Dental Leadership Network event, and topics discussed included an update on GDC activities, and a panel discussion around 'future challenges for leaders in dentistry', which mainly focused on skill-mix, and increasing the correct and full utilisation of all members of the dental team. Diane and I were vocal in stressing the vast scope of skills that dental hygienists and dental therapists hold, and arguing that they should be facilitated to use for the benefit of patients.

Awards

The last few months of 2022 presented a glittering array of awards events where we celebrated some BSDHT members' success among members of the wider profession and our colleagues in the trade. One such evening, which took place at the start of December 2022, was the Dental Industry Awards. BSHDT was shortlisted as finalists in the category for the 'short-term postgraduate course of the year' for our Coaching and Mentoring course, held in collaboration with the University of Kent. I attended along with Sarah Murray, Debbie Reed and Diane Rochford, and while we did not win an award, it was a privilege to be there and engage with others within dentistry. The BSDHT Coaching and Mentoring programme is open to all members. Why not take advantage of this and allow them to guide and empower you to be the best you can be for 2023 and beyond?

The new year can often be a time to start new projects, or resurrect old ones, to try old things in a new way, to work on ourselves, and make some changes. It is also a good time to nurture oneself, so do make time for some self-care and reflection, much like nature is doing, taking time to rest and gather strength to burst into colour in the spring. BSDHT is exploring new ways of delivering educational opportunities to members, working to the new strategy and continuing to offer a network of support and friendship to all our members.

I would like to wish you all the very best for the new year and thank you for your support in the past and going forward.

Miranda

Miranda Steeples

NEW HONORARY VICE PRESIDENT FOR BSDHT

I am delighted to accept the role of Honorary Vice President for the BSDHT working alongside your new President Miranda Steeples and the team.

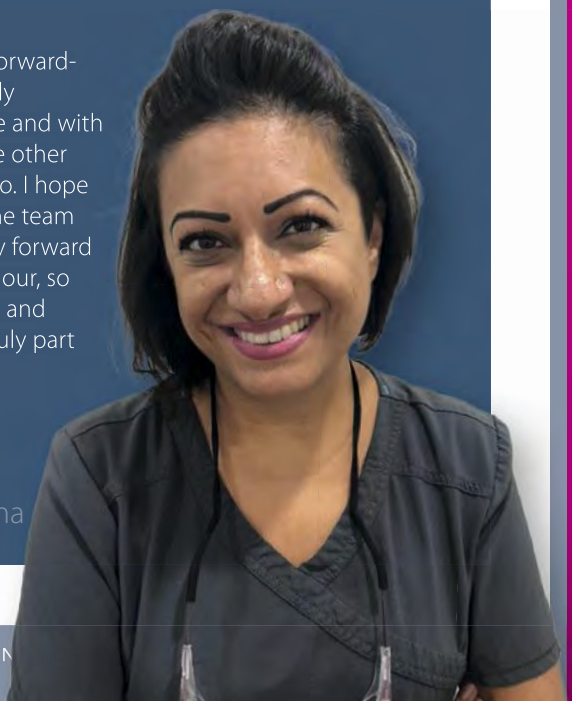
I am a practising dentist and clinical advisor for NHSE. Alongside this, I have set up a leadership scheme for the OCDO, piloted a leadership programme for dentists and dental therapists for HEE and undertaken my own leadership journey chairing the Diversity in Dentistry Action Group. I have taken time to reflect on the profession at large and found that there are many areas that are in desperate need of reform.

For far too long, dental hygienists and dental therapists have been seen almost as accessories to dentists. This needs to change. You are respected professionals in your own right and should be working **alongside** dentists, not ***for*** dentists as has been the case over the years. The undervaluing and underutilisation of dental therapists and their skillsets, knowledge and expertise has had disastrous consequences on the oral health of the nation, leaving unfilled surgeries and patients without access to treatment; treatment well within the scope of practice of a dental therapist.

The role of a dental hygienist needs to be better understood by the public and promoted by dentists to our patients as more than a glorified tooth cleaner; but rather an expert in delivering periodontal therapy and treatment to those who need it. I believe that you should be supported in your work by way of chairside assistance and decontamination dental nurses and be able to prescribe fluoride and local anaesthetic without the rigmarole of having our signatures scrawled somewhere.

The BSDHT is a fantastic forward-thinking organisation, truly representing its workforce and with an open inclusive attitude other organisations can aspire to. I hope to further complement the team and help steer the Society forward by tackling the issues du jour, so that our dental hygienists and therapists feel well and truly part of the dental family.

Nishma Sharma



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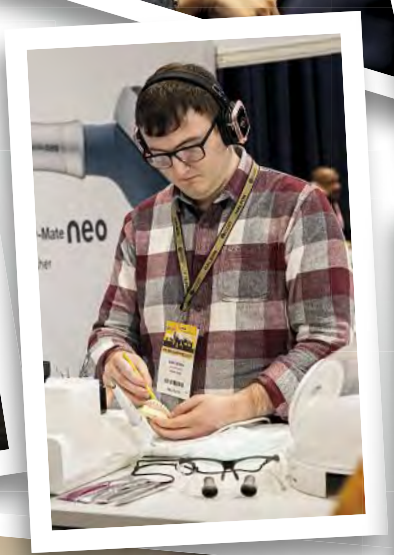



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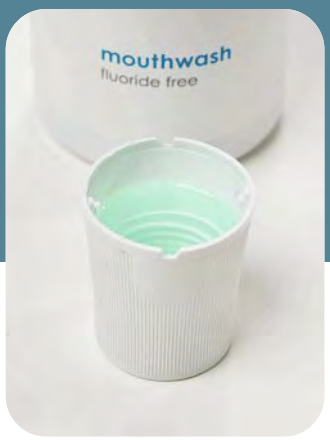

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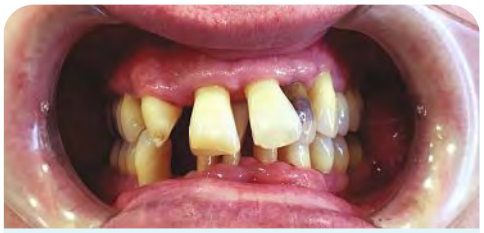

Recall at 12 months.

Case study and photographs courtesy of
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NEW PODCASTS

The Eastman Dental Hospital Education Centre has just launched the second series of *The Eastman Dental Podcast*. This series delves into the careers of the extended dental team and follows on from the successful first series on career pathways for dentists.

Josh Hudson co-hosts with Julia Brewin and together they interview a dynamic range of guests who share their experiences which go beyond the traditional dental career routes. With each episode covering a range of topics, they hope that their guests' achievements will inspire and motivate you to confidently explore new avenues beyond your registrable qualification that perhaps previously seemed impossible.

The duo interview the following guests to discover the difference they are making in the dental world:

- Emma Riley started her career as a dental nurse working in general, specialist and hospital practice and discusses her inspiring journey to becoming the only Macmillan oral health practitioner in the country. She is pioneering improvements in end-of-life oral care.
- Juliette Reeves, a dental hygienist with a special interest in nutrition, delves into her own career journey merging these two disciplines. She offers advice to her more junior colleagues who may be considering extending their role.
- Ben Tighe, a dental therapist and clinical tutor discusses his journey within education, his passion for research and why he recommends teaching.
- Fiona Ellwood, a British Empire Medal winning dental nurse, talks about her mission to empower all dental nurses, being 'a dental nurse that did not take no for an answer' and her role on various boards and committees.
- Anna Middleton shares her experiences of building her 'London Hygienist' brand, how social media has helped her reach where she is today and her plans for supporting the profession in the future.
- Steve Campbell, president of The Dental Laboratories association, discusses the evolution of his career, the current challenges facing dental technicians and his hopes of inspiring the next generation.
- Danka Kucharczyk, a dental hygienist and advocate of alternative technologies, shares her experiences bringing of futuristic equipment into traditional treatment modalities - talking all things lasers!
- Jennie Scrace was a dental nurse, then a dental hygienist before turning 180 degrees to become a small business owner and then a life coach. She talks about exploring careers outside of dentistry and how she has refocussed her clinical experience into a new direction.
- Andrew Noon, an orthodontic therapist, explains why after 15 years as a dental technician he made the change to do what he does today and the factors that prompted this move.
- Mark Price, a clinical dental technician and a product developer, shares his passion for what he does and the drive that led him to develop his own dental product.
- Rachel Leigh, now a dental therapist, talks about her progression from a dental nurse to practice manager to her current role and how her 25 years' experience has allowed her to find her forever practice.

When you listen, we think you will agree that, despite their differences, our speakers all have incredible stories to share!

The episodes will be released weekly and are available on all major streaming platforms and YouTube. Tune into the first episode from 23rd January by scanning the QR code now.

Your potential new career journey awaits!

END OF AN ERA AT THE EASTMAN DENTAL HOSPITAL

by PATRICIA MACPHERSON

After 33 years, our highly respected BSDHT colleague, Julia Brewin, retired as a tutor at the Eastman Dental Education Centre (Eastman School of Dental Hygiene and Therapy) at the end of October 2022.

Throughout that time, Julia has seen a huge transition from the original diploma course for dental hygienists, to the commencement of training of dental therapists at the Eastman and the current BSc training programme. This has involved extensive curriculum development and she has thoroughly enjoyed working with a wide range of colleagues and educators.

Over the years, Julia has witnessed many students transitioning from working on phantom heads, to seeing their first patient, then qualifying and developing into very special and unique professionals, no doubt being greatly inspired by her passion and professionalism. A very gifted communicator, Julia's teaching role has been hugely successful and she has always shown immense support and personal interest in her students.

In addition to her work within the Eastman, Julia feels honoured to have examined for dental hygiene and therapy qualifications externally at other dental schools. She has also been fortunate to be part of some ground-breaking research carried out at the Eastman, working alongside many dental specialists and international post-graduate students, as well as a group of very supportive staff. She has been part of a dental team that has provided outstanding care to those dentally and medically complex patients who have needed a collaboration in a specialist hospital setting.

Julia leaves an education department at the Eastman that is full of energetic, innovative, dynamic and ground-breaking colleagues who stretch the education platform. I am sure her input and enthusiasm will be greatly missed. However, she will

aims to continue to motivate, inspire and educate all members of the dental team by interviewing people on their career journeys.

Although Julia has left her part-time teaching post at the Eastman, she will continue to treat patients at her very successful independent practice in London WI, which she established fifteen years ago.

Since qualifying, Julia has been an active member of BSDHT, holding such posts as Secretary of the London Regional Group, Regional Group Representative on Council, an Elected Council Member and, from 2000-2012, she was a respected and enthusiastic member of the BSDHT Publications Team. She has also lectured extensively at both national and regional BSDHT meetings and had articles published in Dental Health. Her contribution to BSDHT and the dental profession was recognised by her receiving the prestigious Dr Leatherman Award in 2014.

INVITATION TO BECOME BSDHT COUNCIL OBSERVERS

BSDHT

BSDHT Council would like to invite any interested BSDHT members to apply for the role of council observer.

It has been agreed that the work of the BSDHT Council would be more transparent to members if meetings were open to invited observers.

A number of members of the Society may attend full Council meetings purely as observers. Applicants will be accepted on a first come basis and no expenses will be paid.

Council will meet on Thursday 26th January 2023

To register your interest please email enquiries@bsdht.org.uk

SPOTLIGHT ON... PAST PRESIDENT CHRISTINE PLEASANCE

by PATRICIA MACPHERSON

PM: Emma, thank you for speaking to me about your mother, Christine Pleasance. How did her career in dentistry start?

EP: *Christine began her career in 1963 at Guy's Hospital in London, when she joined the Dental Hygienist Training School on their second-ever training course. One of only five students, she completed the course and qualified in March 1964. Christine then worked in general practice, which included private and periodontal treatment, alongside raising her family. Some years later, she was offered a position to work at Guy's Hospital which marked an interesting turning point in her career. She regards this as the most important decision she made during her working life.*

Guy's quickly noticed Christine's potential and offered her tutorial and research positions, in addition to her clinical role as a dental hygienist working predominantly with implants. She has written many articles on the maintenance of implants that have been published in various dental journals over the years. These roles grew in success and complexity, driving her firmly into the Guy's fold.

PM: In what ways has Christine been involved with BSDHT?

EP: *Having been Chair for many years of the Eastern Regional Group of BDHA (The British Dental Hygienists' Association – now BSDHT), in 1997 Christine was elected President. As President, she represented all British dental hygienists and lectured in Scotland and across the globe including Italy and most notably Japan.*

PM: What did she do at the end of her tenure?

EP: *In April 2008, Guy's School of Dental Hygiene amalgamated with Kings' College Hospital and the latter took over the running of the school. Christine subsequently made the decision to leave her tutorage position and become a staff dental hygienist as well as working two days in paediatrics at St Thomas's Hospital in southeast London. In addition, Christine helped to run a Haemophilia Clinic at the Evelina Hospital with Dr Heather Pittford and Dr Jackie Smallridge and treated patients in the cleft palate clinic.*

A few years later, she moved back to Guy's Hospital and chose to work closely with the oral hygiene department focussing solely on head and neck cancer patients. This drew on all her experience in oral reconstruction using the very latest in implant technology. She works here to this day.

PM: Christine certainly has had a long career in dental hygiene, what else is she involved with?

EP: *Christine continues to give ongoing support to those that most need it, something she finds extremely rewarding. In addition, she has joined the Oncology team in practice and has opted to assist in teaching future generations of post-graduate dental students. Recently, she has written a chapter on treating patients who have undergone a laryngectomy in 'Care of Head and Neck Cancer Patients for Dental Hygienists and Dental Therapists'. This is a book about treating maxillo-facial patients, which will be available for purchase from February 2023.*

PM: Why do you think she has stayed in dentistry for so long?

EP: *Christine attributes her illustrious career to hard work, education and the motivational support she has received at Guy's Hospital. She takes great pride in having become a dental hygienist, scaling every rung of the career ladder, including some positions which she created herself.*

PM: Thank you, Emma. Christine is truly an inspiration to all of us in the dental profession and I am proud to have worked alongside her as Honorary Secretary during her term of office as our President.

Christine Pleasance being presented with the 25 year service badge by Sir Hugh Taylor, Chair of Guy's and St Thomas' NHS Foundation Trust

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TAKING THE BOAT TO UNIVERSITY

by ELIZABETH WATHEN

As a child, my family and I would make the 40-minute crossing to Portsmouth or Southampton by the car ferry and I remember thinking that we were crossing the sea like pirates. We would get off at the other side, and I would hear people speaking different languages into their phones. I genuinely thought we'd crossed to the opposite side of the world!

I live on the Isle of Wight (IOW), and I'm a 3rd year dental hygiene and therapy student at the University of Portsmouth. I did my dental nurse training at an NHS IOW practice where I learnt just how obsessed with teeth one can get. A year into my course I started looking at how I could become more involved with the clinical side, which is how I learnt about the degree I am studying for now. Considering the IOW does not have much in the way of educational institutions, I was thrilled to discover a university with state-of-the-art dental facilities just over the water!

On the IOW, we have several ways of travelling to 'the mainland', all of which are by boat. The one I use is the Fast Catameran, or Fastcat, which goes from Ryde Pier to Portsmouth Harbour. We also have ones that go to Southampton and even Lymmington.

My typical journey consists of waking up at 5am to have breakfast and leaving by 06.50 to drive to Ryde and catch the 07.45 boat. Then I park my car and walk up the pier, which is around half a mile long. The boat trip takes 22 minutes, which can either be extremely pleasant, or not, depending on the number of screaming children or barking dogs. I usually read a book to pass the time, unless the waves are really strong. I walk from the port to whichever uni building I happen to be in that day.

At the end of the day I make the journey in reverse, but depending on when my day finishes, I may have to wait quite a while for the next boat. Since Covid-19 there has not been a boat at 11.15am or 14.15. So, If I miss the 13.15 boat, I will have to wait for two hours. In first year, I found this extremely frustrating but now I have so much work to do that I am quite happy to do some of it at the cafe while I wait.

The Hovercraft is much quicker to board (no pier) and only takes 10 minutes to cross the water. However, it is the first boat to be cancelled at the slightest sign of wind or rain. The Fastcat is a relatively sturdy little boat, and is hardly ever cancelled. But even the stormy weather of last winter made me question its abilities. During one particular a return boat trip, it took so many attempts for the captain to make port, that I honestly thought we would be taken back to Portsmouth!

The past two years have been a lot to get used to, but I think now that I'm coming to the end of my degree I have, ironically, got accustomed to taking the boat most days, and I would miss it if I stopped. The journey gives me time to slow down, have a coffee, and either relax, or get some extra studying done. I graduate in summer 2023 and my plans include applying for foundational therapy training three days a week, and working as a hygienist for the other two. If I get accepted, I am likely to work in a practice over the water, but that's fine. I love the job I'm training to do, and if I have to cross the water to do it, then I'll gladly do so.

Author: Elizabeth Wathen is a 3rd year dental hygiene and therapy student at the University of Portsmouth. After graduating she hopes to work on the Isle of Wight to support the dental needs of her island community.

Email: elizabethwathen008@gmail.com

DIRECT BILLING OF DENTAL SERVICES FOR ORAL HEALTH PROFESSIONALS – THE AUSTRALIAN EXPERIENCE

by LEONIE M SHORT

As dental professionals, we are a part of a much larger international community. Dental hygienists (DHs), dental therapists (DTs) and oral health therapists (OHTs) continue to learn from each other in terms of: educational curriculum; research output; regulatory framework; legislative structure; industrial influence; leadership and capability; and professional lobbying and advocacy activities. And in some cases, we have also been able to work together and assist each other.

International collaboration

A good example is the 2003 project to train the first dental health aide therapists for the Alaska Native Tribal Health organisations at Otago University in Dunedin, New Zealand.[1] Community Catalyst now has a Dental Access Project in the USA to expand access to oral health care by supporting state-based advocates in identifying and implementing effective community-informed solutions. Dental therapists are playing an integral role in expanding access to oral health care for more than 48 million Americans who live in designated 'dental professional shortage areas.'[2]

Such collaboration is not new! As long ago as 1919, a dentist in Melbourne, Australia, advocated for a state dental service based

IMAGE COURTESY OF: **PIQSELS.COM**

on the British system of 'dental dressers' and the 'Victorian oral hygienist' who could provide much of the care under supervision of a dentist. And in 1923, the Acting Director of Education for the State of Victoria wrote to the Principal Dental Officer for New Zealand's School Dental Service expressing interest in the scheme training 'School Dental Nurses'. Based on the success of the school dental nurse scheme in New Zealand, the first dental therapy schools opened in Tasmania and South Australia in 1966 and 1967 respectively.[3]

The term, oral health therapy, emerged as an award title for a diploma in 1996 at the University of Melbourne and then as a degree in 1988 at the University of Queensland.

From these early beginnings, and the influence of policies, programmes and key stakeholders in the United Kingdom and New Zealand, the oral health professions in Australia have continued to grow and develop to what we have today: eight bachelor's degrees in the tertiary sector for oral health therapists; one bachelor's degree for dental hygiene in the tertiary sector; and one advanced diploma for dental hygiene in the vocational education and training sector. Clinical placements are conducted within a combination of public, private and community (including residential and aged care facilities, and Aboriginal controlled health centres) settings. From a bridging programme in Victoria in 2007-2008, La Trobe University was the first accredited course for adult scope of practice in Australia. Most of the OHT courses in Australia are now accredited for adult scope of practice. For those that are not, there is a choice of Graduate Certificate or Continuing Professional Development (CPD) courses for adult scope of practice in Sydney, Melbourne and Adelaide.

Dozens of our graduates have also progressed to coursework and research higher degrees including Honours, Masters and PhD. Oral health professional academics and researchers are now supervising their own PhD students to build a knowledge base around clinical practice, work environment, education and public health concerns for oral health professionals. The growth of our profession has developed together with the research output that underpins our specific knowledge base.

Professional representation

We are represented by The National Dental Hygienist Association of Australia (DHAA) and the Australian Dental Therapist Association (ADOHTA), formed in 1985 and 1987, respectively. These two organisations have changed over the years in terms of name, representation and structure, and we are hoping that they merge in 2024.

Legislation

The regulatory framework and legislative structure have also changed over the years.

On 1 July 2020, a revised Scope of Practice Registration Standard was enacted which removed the requirement for a structured professional relationship between a dentist and an oral health professional. The removal of any references to 'independent practice' was evidence that oral health professionals were now recognised as 'independent practitioners'. This has enabled more flexible and varied practice settings for oral health professionals in Australia, including mobile dentistry and whitening services.

Performer numbers

Finally, on 1 July 2021, after many years of debate and lobbying, the Fair Work Ombudsman added dental hygienists and oral health therapists to the list of health professionals in the Health Professionals and Support Services Award 2020. Dental therapists were already included in the list and covered by the award.

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* Plaque bacteria, with twice daily four weeks of continued use. ^ Claim applies to PerioGard® Gum Protection toothpaste.
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PROFESSIONAL ORAL HEALTH

Continued...

THE AUSTRALIAN EXPERIENCE

DHAA continued to work together to advocate for Medicare and private health insurance provider numbers for their members. The negotiating team agreed to, or accepted, an 'opt-in' provision for the purpose of claiming funds directly from the Child Dental Benefits Scheme (CDBS). This provision commenced last year on 1 July 2022 and in November 2022 approximately 226 Medicare Provider Numbers were issued from 5317 oral health professionals registered in Australia.[4]

This number is much lower than expected as most public sector employees are still claiming under a nominated dentist's Medicare provider number and because the dentists with whom oral health professionals work with in the private sector want the traditional system of using the dentists' provider numbers for the CDBS to continue. This is despite the fact that if fraud is detected it is the dentist, whose Medicare provider number has been used, who is responsible for refunding monies rebated from the CDBS back to Medicare.

ADOHTA and DHAA have also negotiated for seven private health insurance funds to recognise and accept direct billing of dental services through a provider number from an oral health professional and another seven private funds are in the process of implementing this provision.[5] For the first time, invoices and receipts for dental procedures for patients can now include the name and provider number of the oral health professional who performed the procedures. Using the dentist's name and provider number on invoices and receipts is misleading and incorrect. More transparent and accountable billing practices are now available for dental patients in Australia.

It is also important that all the dental services that oral health professionals provide with support from the CDBS, Veterans' Affairs and private health insurance funds (20% of dental practitioners in Australia) are accounted for in the data. For over 40 years, the data assumes that dentists and dental prosthetists are delivering all dental services for patients.

Access to direct payments from eligible patients with Veterans' Affairs and the ability to directly refer patients for dental radiological services (OPGs) is still outstanding and negotiations are ongoing. The change from 'opt-in' to 'mandatory' use of Medicare and private health insurance provider numbers for oral health professionals is the current task at hand. At the right time, it will require changes to the relevant dental benefits, CDBS, health and private health insurance legislation.

Direct billing of dental services for oral health professionals in Australia was only possible after decades of safe and competent clinical practice from highly respected and well-educated practitioners combined with the expertise of courageous academics and researchers, and forward-thinking leaders who drove reform in educational curricula, regulatory frameworks and legislative structures across the country.

An understanding of our journey may assist our colleagues in the United Kingdom with your own advocacy and lobbying activities to achieve direct billing of dental services. We are here to support and assist you.

Author: Leonie is a dental therapist. She helped establish Australia's first dual-skilled Bachelor of Oral Health degree at the Universities of Queensland in 1998, Australia's first new dental school for 57 years, Griffith University in 2004 and at CQUniversity in Rockhampton in 2012.

Leonie has been awarded over $1.8m in competitive research grants and has numerous publications in refereed journals.

Leonie was the first dental therapist to be appointed as a Director to the Australian Dental Council in 2004 and was the first dental therapist to become a member of the Australasian Council of Dental Schools in 2012. Leonie is now the owner of Oral Health Care Training and Education – she works to improve oral health outcomes for residents and clients in the aged, home and disability sectors.

Leonie is keen to progress oral health professionals in terms of research, knowledge and skill development.

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A longer, more detailed version of the history of the Australian experience is available by emailing: **editor@bsdht .org.uk**

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SPOTLIGHT ON COACHING

A year has passed since BSDHT launched its Coaching and Mentoring Programme for members. Here Emma Hornby explains the concept of coaching and how it can help propel an individual to greater things?

We can all experience moments when we feel uninspired or drained, as if something is missing and life is passing us by. We may have little motivation to push ourselves further and fear of failure keeps us static in our comfort zone. We may then supress our ambition for 'another day' unable to pinpoint why we feel unfulfilled, lost or confused.

Living a life misaligned with personal values and beliefs can create inner conflict and bring a nagging sense that 'something isn't right.' This can feel extremely draining. Stresses of modern living can impact job satisfaction and performance, affecting relationships and general wellbeing. According to the Health and Safety Executive, stress, depression or anxiety accounted for most days lost due to work-related ill health in 20/19/20. On average, each person suffering took 21.6 days.[1]

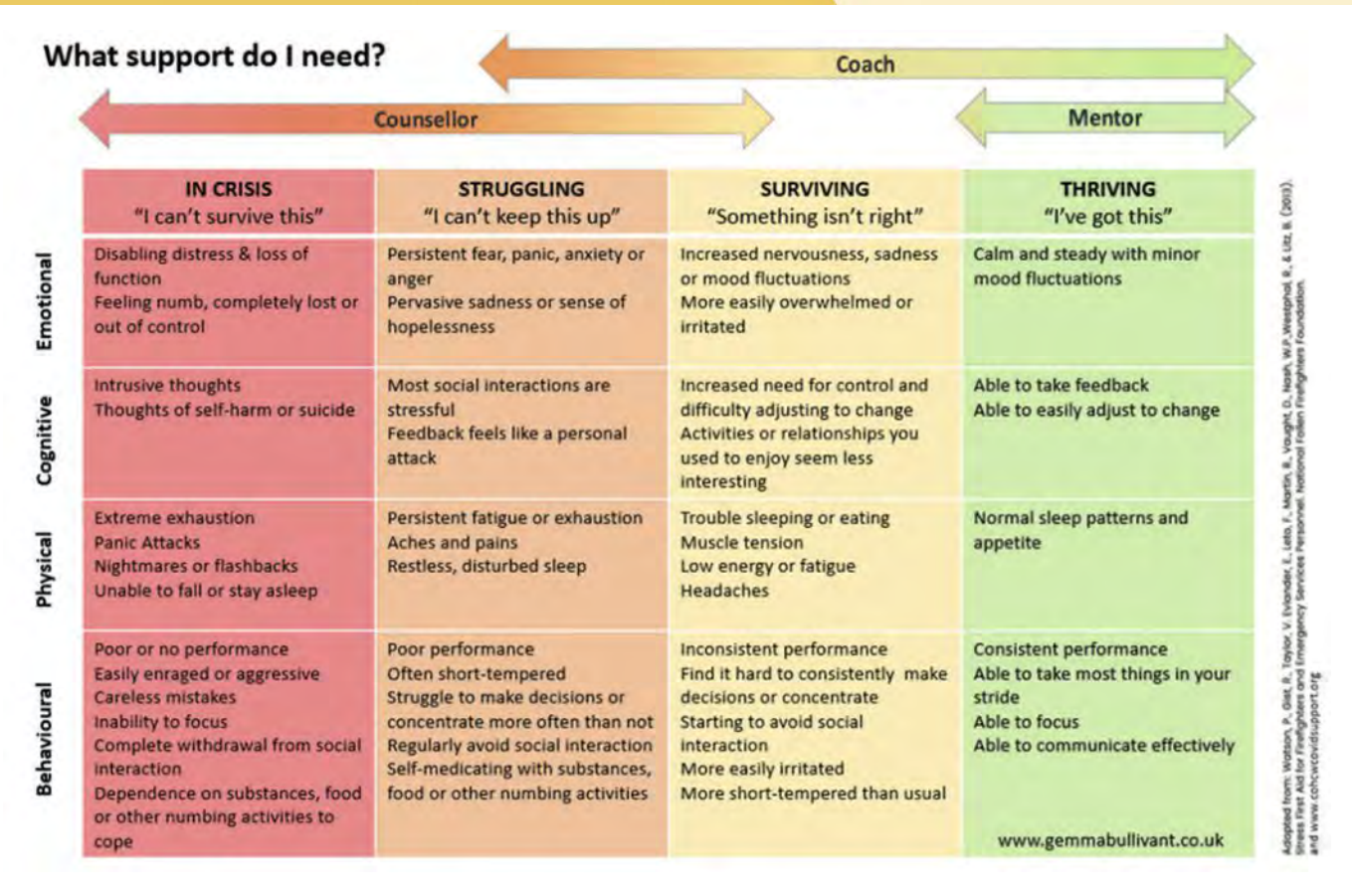
Even though friends, family and colleagues may have our best interests at heart, it is not always feasible to seek their counsel and, although well-meaning, advice can often feel like a misplaced opinion.

When to consider coaching

If you are sitting in a place of self-doubt or confusion, unsure of what decisions to take to realise your ambition, or feel stuck in your current situation, coaching can provide guidance by examining thoughts and beliefs whilst addressing challenges and blocks to overcome internal obstacles. It can increase clarity of thought and uncover underlying reasons for reluctance, dissatisfaction and unhappiness.

Alternatively, you may have a fantastic job, balanced family

Figure 1: **Coaching Continuum[3]**



life, feel fulfilled and think, *'Why would I need coaching?'* However, this is one of the best times to choose coaching, as that positive mental space is a great platform to further enhance happiness and wellbeing. Growth mindset can be capitalised on to further enhance life, both personally and professionally.

Is there a direction you want to go but unsure of where to start? Do you have an unfulfilled ambition that you would love to achieve but feel you need guidance and someone to bounce your ideas off? Coaching aims to encourage optimum performance by focusing on developing skillsets, personal qualities, and confidence. There are commonly agreed characteristics of coaching:

- The process typically lasts for a defined period
- It is a non-directive form of development
- It focuses on improving performance and developing an individual
- Activities have both organisational and individual goals
- It provides people with the opportunity to better assess strengths as well as development areas
- It is a skilled activity, delivered by people trained to do so

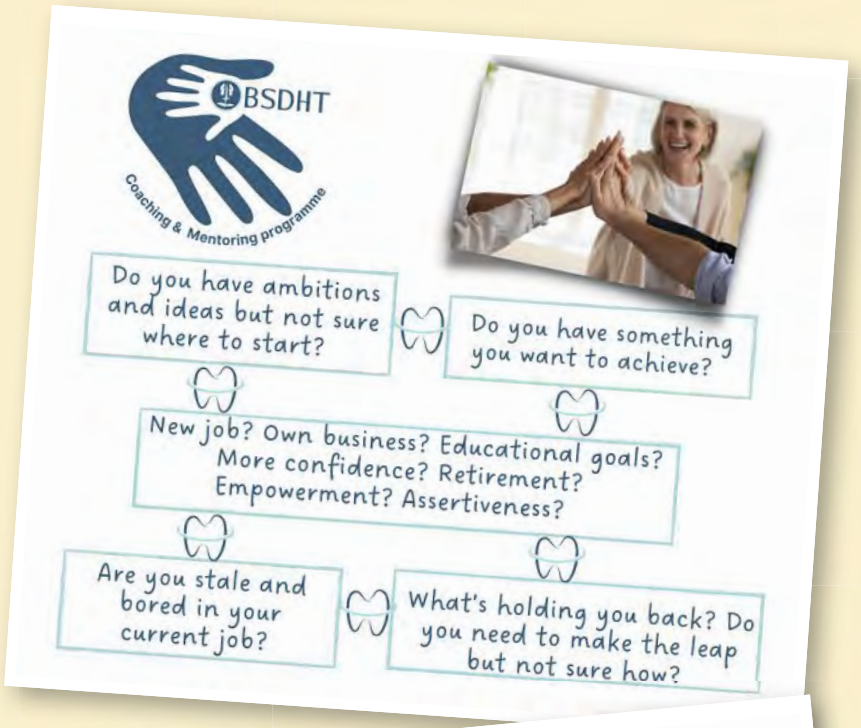
Examples of situations where coaching is a suitable workplace development tool include:

- Developing people skills
- Supporting individual potential and providing career support
- Developing strategic perspective after a promotion to a more senior role
- Handling conflict situations to effective resolution
- Dealing with the impact of change on individual roles

Living life with values and purpose can lead to fulfilment, and coaching can create space to explore these in depth. By taking positive practical steps we become aware of changes needed to align life with personal values. These changes can often be a difficult commitment, but accountability to a coach increases the likelihood of success. A fresher perspective may develop with more enthusiasm and energy as the relationship with our inner self changes.

Coaching is about examining and closing the gap between future aspirations and current reality by motivating and empowering positive change

Our jobs play a vital role in our lives and are necessary to pay the bills and fund our hobbies. A



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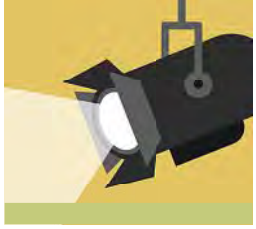
SPOTLIGHT ON COACHING



life consumed by work, with little leisure time, could lead to increased exhaustion and stress, negatively affecting energy levels. Coaching can identify motives and re-evaluate work-life balance. It gives a dedicated space to explore self-limiting beliefs and insecurities and a supportive coach can share the tools to address and resolve these. In turn, this can lead to increasing confidence and resilience in managing fears and mental blocks.

The role of a coach

For a coach to have a better understanding of an individual's current situation, they may share their own subjective experiences but stop short of offering opinions or giving advice. Coaches are a sounding board for ideas and listen to challenges and concerns non-judgementally, in turn helping to identify and remove self-limiting beliefs. They offer tools to create an action plan and encourage commitment to progress whilst providing support and motivation. The process of examining one's own beliefs, feelings and experiences is entirely coachee focused, and it is the individual who is solely responsible for all decision making.

Although the benefits of coaching can be wide ranging, it is not the solution for every developmental question and it is important to consider and refer to other interventions if appropriate. Some individuals may lack self-insight or be resistant and unresponsive. It is important to assess potential readiness and motivation to achieve their desired outcome.

BSDHT has developed an expression of interest form to review whether or not coaching or mentoring is the most appropriate approach in assisting development. BSDHT members can request a 'discovery call' with a coach or mentor of their choice to ascertain if the coaching and mentoring programme is suitable before making a commitment.

Coaching provides the space and opportunity to analyse purpose, identify values and beliefs and create accountability to achieve personal and professional goals. This in turn can lead to increased productivity, better work / life balance, empowerment, and living a happier healthier life.

To find out more about the BSDHT coaching and mentoring programme, visit: **https://www.bsdht.org.uk/mentoring/** or email BSDHT Coaching and mentoring rep: Emma Slade-Jones at: **MC1@bsdht.org.uk**

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by ANDREA GRIFFIN

MANAGING MINDSET KICKING SELF-DOUBT AND BUILDING CONFIDENCE

At times, we all need help to elevate our mindset to get to where we want to be in life. Our mindset can influence us in so many ways, from our health and well-being to our level of success in life. It is our view of the world; a set of established attitudes that help us deal with all sorts of situations and scenarios. Mindset impacts everything we think, say and do. Our mindset has the power to create success and failure - we have all heard of, or even possibly experienced, defeating negative mind patterns. Having a good, positive, strong and confident mindset really aids us not just in life but also in our work. It sets us up to handle knockbacks and, during difficult days, it encourages us to get back up and keep going, helping us to build resilience in life.

Maintaining a strong mindset is more important than ever, not just because dental care professionals work in a profession where we give all the time - and this in itself brings challenges - but also after the testing last few years of the Covid 19 pandemic.

Living the life you want

You can build a strong mindset by improving your self-confidence, kicking self-doubt and believing in yourself! It is vital that we do not believe every negative thought but actively make decisions to take the right steps to promote a positive mindset. This can help us not just in everyday life, but in the clinical workplace.

Let's start with self-doubt. Self-doubt occurs when we lack confidence or feel incapable of doing the things we need to do. It could be about our thoughts, opinions, decisions or any self-views. A certain level of self-doubt is good, because it indicates that you understand what you need to improve in order to do a better job. However, persistent feelings of self-doubt can hugely

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affect your life in a negative way, resulting in delayed actions and even missed opportunities.

There are lots of things that we can do to kick self-doubt. Here are some top tips:

Daily affirmations

Affirmations are a good way to start the day. The media often publishes articles about the power of affirmations and manifestations, and how if we *manifest*, we can get the life we want. Affirmation is the practice of positive thinking and self-empowerment. This usually takes the form of a powerful, personal statement that is repeated to oneself daily. For the affirmation to be effective, it needs to be spoken in the present tense. It must be positive, personal to you, and specific. Ideally, it should be spoken out loud, but writing it down is fine, as there is power in the pen! An example would be: *"I can do this. I am enough. I am confident!"*

Journaling and timelines

These are so important. Writing our thoughts and feelings down can be very cathartic and help to clear our mind. It also helps by releasing pent-up feelings and everyday stresses and strains. But, most of all, it allows us to let go of negative thoughts. The process is not just about focusing on the negatives in your life; it is about noting what successes you have had, and what went well today. Celebrating the everyday small wins adds up to a big win! Timelines are one of my particular favorite tools to use to kick self-doubt. I use this technique a lot with my coaching clients. Sometimes we cannot see the wood for the trees; we doubt ourselves and our abilities to achieve what we want. Writing a timeline of all of your achievements reminds you of what you have achieved so far, and gives confidence to pursue those things you still want to do. A useful exercise is to try completing a timeline of your life in general, or career.

Practise self-compassion

A simple strategy is to practice self-compassion, and build self-trust. Trust in your own abilities and believe in yourself. Although this can be challenging, it is important to believe in yourself, otherwise how can you expect others - most of all patients - to believe in you? This process must start 'within'. We quite often listen to our own negative self-talk, but it is important to question whether this actually stems from fact, an event or incident, or are we worrying and 'catastrophising' in our minds? If it is becoming debilitating, then it may be a good idea to seek some external help. You could be experiencing Imposter Syndrome. According to Oxford languages it is:[1] *the persistent inability to believe that one's success is deserved or has been legitimately achieved as a result of one's own efforts or skills.* People suffering from impostor syndrome may be at increased risk of anxiety. Common characteristics are: berating your performance; negative self-talk; perfectionism; fear you will not live up to expectations. Originally, the concept of imposter syndrome was thought to apply mostly to high-achieving women. Since then, it has been recognised as a more widely experienced condition. It can affect anyone regarding their work, background, skill level or degree of expertise. We can also experience it at any age and at any point of our career. If you really are struggling with self-doubt and feel that you could be experiencing imposter syndrome, then it may be time to see an Neuro Linguistic Programming (NLP) coach.

So what can we do to improve our mindset in general life?

There are many ways that we can do this. Here are a few of my top recommendations. Some may seem basic, but it is always good to have the foundations in place.

Nutrition and sleep

Getting the right nutrients and the right amount of sleep for you is a good starting point. Lack of sleep makes us tired, grouchy and even ill. Not getting enough sleep really can negatively impact our cognitive functions, let alone our long term health.

Pain

Being in pain can have a massive effect on our mental wellbeing and mindset, and can also be linked to poor quality sleep. Being in pain can, unfortunately, affect our professional work. Using our hands all of the time, and leaning over with poor posture - which leads to back or neck pain – or various repetitive strain injuries, puts us at risk from developing problems. According to Healthy Place:[2] *"Pain can cause mental health problems. Further, it's not uncommon for physical illnesses, especially chronic ones, to lead to mental health disorders".* Pain can wear us down, both physically and emotionally and can affect our mindset and confidence.

Practise gratitude

Another game changer to help improve our mindset is the practise of gratitude. Numerous studies have shown that practising gratitude is good for our health, not just mentally, but physically too. It is so easy to take the good things in life for granted, however small! Practising gratitude is something that I personally practise, and I also recommend it to my clients. It makes us more optimistic about our lives and, of course, more grateful. This leads to a more positive and confident mindset. I always end the day by making physical or mental notes about three great things about my day, however big or small.

Know what you can control

In life, we spend so much of our time and energy on things that we cannot control, or even worry about things before they actually happen! This pattern of behaviour steals important energy and can promote an anxious, negative mindset.

Setting goals is also paramount to gain and maintain a positive and focused mind. Setting goals and working towards something improves our mindset and focus, and gives us a sense of purpose, be it a professional or personal goal. It is good to have goals!

Being flexible in life can also help us. Being open to life, its opportunities and not having a fixed mindset helps us to look at other ways to achieve happiness. This will help you not be thrown off course if life does not go the way you planned or hoped. Being flexible also decreases anxiety in life.

How to build confidence at work

So, how can we promote inner confidence as a clinician? Let's start with time - give yourself enough! We need to do a lot

as dental care professionals: carrying out treatments, writing notes, decontamination etc. Time management was the second biggest pain point in a recent poll that I carried out. The trouble is, if we rush and constantly feel stretched and stressed, mistakes can and do happen. We can doubt ourselves because we were rushing! Effective time management aids confidence.

How we communicate with others is paramount. Do not be afraid to speak up! This is not the same as being rude or difficult - if something really is not working for you then discuss it. After all, we have a duty of care to ourselves, not just to our patients. You need to be professionally assertive; ask questions at work and get involved with the team. As dental hygienists and therapists, we quite often work in more than one practice and sometimes it is difficult to stay in the various practices' loops. But I would actively encourage you to communicate with the team and the practice. Unfortunately, from my recent poll on the hygienist and dental therapist group on social media, the highest pain point was lack of support from the practice, making people feel excluded.

However, if something really is not serving you, then change it! If you have worked on your mindset and successfully managed to change how you look at a situation, and have been 'solution focused', but you still feel that it is affecting your mental wellbeing and confidence, then maybe it is time to change it. You need to know your worth.

Another key to promoting confidence is our wellbeing, both physically and mentally. In the world of NLP, mind and body are one system, and they influence each other. Improving your physical health reflects your mental well-being and vice versa. It is so important as clinicians to look after ourselves, as we 'give' all the time to others!

One way of increasing confidence is continuous professional development. It is paramount when building confidence at work, to undertake professional development tailored to your weaknesses and what you would like to gain more confidence in. It could be dealing with challenging patients or taking radiographs. Knowledge gives us confidence and power. Consider expanding your current qualifications.

This takes us nicely on to what you say to yourself. Talk to yourself as you would a friend: be kind, motivational and encouraging. We often would not talk to others in the way we talk to ourselves! Focus on your strengths, not your weaknesses. Think about, for example: what are you really good at; what is your special gift; are you really good with nervous patients; are you good at taking impressions? Celebrate your strengths!

Your posture and body language is very important. Practice being aware of how your posture affects your confidence and how it impacts a situation. Use positive body language when you are moving around the practice and communicating with your patients and fellow peers. Stand tall with your shoulders back, engage with good eye contact and smile! It might seem basic, but it is so important.

Lastly, you cannot always control what happens in life and at work, but you can control how you react to it. Take back the control…

Author: Andrea is a personal development coach and NLP practitioner, who specialises in working with dental care and health care professionals. She has over 25 year's experience in dentistry and healthcare. Having worked for many years as a dental hygienist, and then in management, coaching seemed a natural next step. Andrea is incredibly passionate about helping her fellow dental care professionals.

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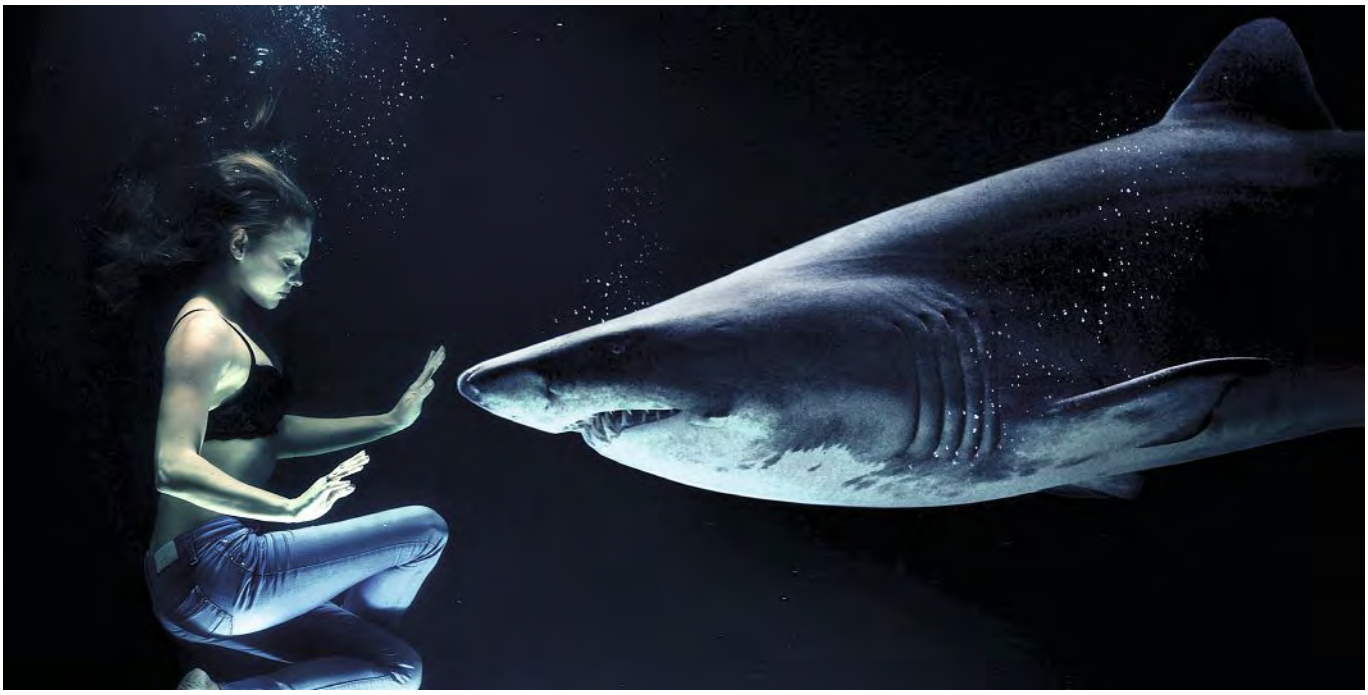

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FUNCTIONAL, INTEGRATIVE & LIFESTYLE MEDICINE

by SIOBHAN KELLEHER

Introduction

Functional medicine (FM) is a science-based, whole systems approach which aims to identify the fundamental underlying causes of clinical symptoms. It looks not for what is wrong with an individual but rather attempts to discover why an individual has an issue.

FM is not alternative medicine; it simply takes some new findings from systems biology and examines how different influences can impact a person's health. Understanding the underlying causes of a disease provides expanded options about how to treat that disease.

While clinicians have been taught to treat symptoms, functional medicine is much more interested in discovering what has happened to create a problem. It considers the way the body works in systems rather than focusing on just the disease process. Genetics, toxicology, nutrition, psycho-spiritual issues, trauma and 'the big picture' all have roles to play. This provides a set of tools that can be used to work with patients systematically when they present with a chronic problem. FM is about unravelling the cause of that problem and then addressing those underlying causes. Ultimately, FM engages with individuals as active participants in their care.

The effects of positive psychology, lifestyle and wellbeing of individuals and organisations bring a new and refreshing paradigm for health promotion practitioners to embrace. Wellbeing includes positive emotions, engagement, satisfaction and meaning in life. Authentic happiness using positive psychology to realise the potential for lasting fulfilment has been practised widely.[1]

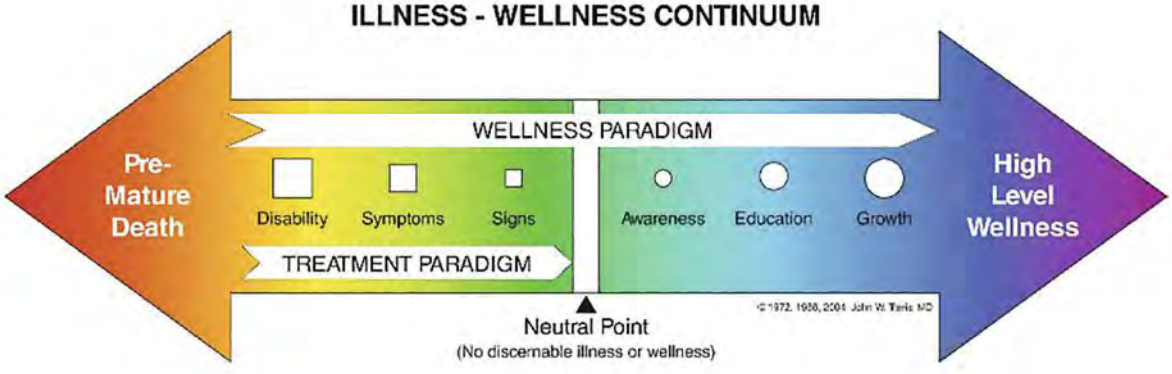
But can non-medical factors, such as mind functions, help people resist illness and have greater wellbeing? Evidence suggests that it can, because changing thoughts imply a changing brain, thus changing biology and body. The inclusion of positive psychology practices within the workplace as a capital investment is a massive step forward when assessing economic security and productivity.[2]

Healthcare and healthcare delivery have been consumed with the observation of illness and identifying risk factors associated with disease. This sick-based system and focus has raised awareness of risk factors such as tobacco use, dietary intake, sedentary lifestyle, drug and alcohol abuse and unsafe practices that can lead to a host of non-communicable diseases.[2] However, integrative medicine is a healthcare model that uses multiple approaches, such as conventional medicine, lifestyle medicine and evidence-based complementary approaches to address the individual patient's health needs and goals and enhance their long-term wellbeing.[3]

Non-communicable diseases such as heart, respiratory disease, cancer, obesity and diabetes are responsible for two-thirds of premature deaths worldwide. On top of the social and psychological impacts, the united nation expects the global economy's loss could reach $47 trillion by 2030 if things remain the same.[4]

In 1946, The World Health Organisation defined health as *'…a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.' In 1986 it added: "…a resource for everyday life, not the objective of living. Health is a positive concept emphasising social and personal resources, as well as physical capacities."*[5]

Figure 1: **Paradigms of health, wellbeing and disease**



Paradigms of health, wellbeing and disease

Healthcare systems, often described as disease care systems, focus on the pathogenic, highlighted on the left-hand side of the Paradigms of health, wellbeing and disease diagram (Fig.1).

A majority of the population conceptualises health as an absence of illness or disease. Looking at the right-hand side (Fig.1) is what Professor Aaron Antonovsky describes as the *study* of human health and wellbeing, rather than *focusing* on disease-causing factors (pathogenesis).

Antonovsky coined the term Salutogenesis meaning *generation of good health* (from the Latin *sal* meaning good health and *genesis* meaning generation).[6] Pathogenesis is a reactive approach to treating what is wrong, whereas salugenesis is a proactive approach to adopting health promotion behaviours hence health-producing rather than disease-producing. The right-hand side (Fig.1) maximises health, wellbeing and happiness, rather than just treating or curing disease. This emerging way of thinking focuses on this much broader conceptualisation of wellness.

Non-communicable diseases

Non-communicable diseases kill 41,000,000 people yearly, equivalent to 71% cent of deaths.[5] Cardiovascular diseases, cancer, respiratory disease and diabetes cause 80% of premature, non-communicable diseases. A shocking 80% of spending in the United States is related to poor lifestyle choices.

Closer to home, five conditions - diabetes, cardiovascular disease, cancer, chronic respiratory diseases, and mental health disorders - account for an estimated 86% of the deaths and 77% of the disease burden in the European region. However, 80% of heart disease, stroke and some cancers, can be prevented through improvements in diet and lifestyle.[5]

The Lancet's global risk assessment is published every ten years, the most recent in 2018. Researchers examined 46,749 studies and found five leading risks in 2017. These were: high systolic blood pressure; smoking; high fasting plasma glucose; high body mass index; and short gestation of birth weight.[7]

In Ireland, 1.7million people over 18 years of age currently have one or more chronic disease; 49% over the age of 50 have one chronic disease; 76% of deaths are due to these diseases, and are rising yearly by 4%. While this impacts individuals, there is also a massive impact on the economy.[8]

A report published by the McKinsey Corporation looked at prioritising health using existing interventions found that this could reduce the global disease burden by 40% over the next two decades.[9] The focus from McKinsey suggested making health a social and economic priority and keeping health on everybody's agenda. So, how can integrated and lifestyle medicine help?

Lifestyle medicine

Lifestyle medicine is an intervention using an evidence-based therapeutic approach which has emerged to reverse and prevent these chronic diseases. It includes: a whole food, predominantly plant-based diet; regular physical exercise; sleep hygiene; stress management; avoidance of risky substances; and social interaction.[10]

Gary Egger, one of the thought leaders on lifestyle medicine, explains lifestyle medicine as applying environmental, behavioural, medical and motivational principles to manage lifestyle-related health problems in a clinical setting. In recent years this has included self-care and self-management.[11] Lifestyle medicine approaches are different to traditional medicine because they address behaviour change: the person becomes an active partner in the relationship. While many physicians have had training in medicine, they often need more time to encourage and motivate behaviour change. Healthcare professionals may be confident in some areas of lifestyle medicine but lack in others. Many universities are now incorporating such content into their courses.[11]

David Katz's summary in 2013 noted the aggregation of evidence collected over the years established, as a bedrock fact of modern epidemiology, that tobacco, poor diet, and lack of physical activity constitute the leading causes of chronic diseases. Katz talks about the solitary use of feet, fork, and fingers, which could reduce the risk of chronic diseases by 80%: feet are physical activity; the fork is the diet; and fingers are smoking and alcohol.[12]

Epigenetics

Science is increasingly showing that these interventions relating to diet, physical activity and tobacco avoidance have epigenetic potency; they may have the capacity to alter gene expression. Some research is starting to emerge about the interactions of lifestyle behaviours and the manifestation of genetic predispositions. Researchers have known about some of the factors for some time; only in recent years have they started to piece the facts together and increase knowledge in the area.[13]

Complex systemic relationships between the brain, mind and body have become known; our brains and minds and bodies are interconnected. Non-communicable diseases are growing, and looking at the main risk factors, they are behavioural. Mental health is emerging as a global issue.

Positive organisational scholarship and psychology

Positive psychology and positive organisational scholarship provide tools to improve the happiness and wellbeing of everyone. Positive education has the potential to enhance resilience in young people. Providing positive psychology education throughout organisations, the workplace, schools, colleges and universities, by adopting a positive educational approach, combines education, knowledge and skills with the development of each person in a positive way relating to their health and happiness.[14]

- **Positive organisational scholarship**

Positive organisational scholarship (POS) is interested in studying positive outcomes, processes, and attributes of

organisations and their members. POS focuses on changes typically described by excellence, thriving, flourishing, abundance, resilience and virtue. POS represents an expanded perspective and puts an increased emphasis on ideas of good and positive human potential. It encourages and energises an organisation to motivate colleagues. POS is distinguished from traditional organisational studies in that it seeks to understand what represents and approaches the best of the human condition.[15]

- **Positive psychology**

Positive psychology has been defined as the scientific study of humans living to their full potential, aiming to promote the factors that allow individuals and communities to thrive.[16] It is about thriving and flourishing and reverting to the World Health Organisation's definition of well-being: mental health as a state of well being, not merely the absence of depression or anxiety disorders but rather a state in which every individual realises his or her potential to cope with everyday stresses of life, to work productively and fruitfully and make a contribution to his or her community.[17]

Traditionally, the approach in psychiatry and psychology has been to treat mental illness to bring people who are unwell back to a stage where mental illness is absent. Referring back to figure 1 - the area to the right - improving and increasing well-being and happiness is where positive psychology as a scientific discipline comes to the fore. Martin Seligman spoke about this in his landmark speech in 1998 when he became president of the American Psychological Association. He argued that psychologists needed to study what makes people happy instead of merely treating mental illness.[18] Seligman suggests we can cultivate a positive perspective. Optimistic people do better in many areas of healing and health than pessimistic people.

Metaflammation

Metaflammation is a discovery from the mid-90s which shows that in addition to the inflammatory response to an acute infection there is also underlying low-grade inflammation. Metaflammation is a chronic state of inflammation mediated by macrophages in the colon, muscle, liver and adipose tissues. While an acute response goes away, metaflammation does not.

Metaflammation-altered macrophage polarisation is associated with: atherosclerosis; insulin insensitivity; inflammatory bowel disease; cancer; and autoimmunity. Further mechanistic research into the skewing of macrophage polarisation promises to profoundly improve global health.[19]

Gut microbiota

We need to change our paradigm thinking about how the gut functions and how the gut and the brain function together, influence each other and how important the gut may be in a whole range of disorders that were never previously considered to be important.[20] There is a substantial body of evidence supporting the role commensal organisms play in the response of the stress system. There is much research on the role of the gut microbiota in all aspects of health and disease and brain health.[21]

Conclusion

Health promotion practitioners recognise and appreciate wellness through health-enhancing interventions. Starting at an individual level, we are called to make the world a better place and are in this together. Whether a business or public sector organisation pursues wellbeing and health as a formal part of its strategic plan, a societal commitment to these broader social goals is essential. Individuals need to feel joy, gratitude, meaning and happiness when doing so; the time has come for influential leaders and visionary leaders to put forth the effort and refine the framework for the transformational change required for us all to move from effectiveness to greatness.

Health promotion professionals can assist in this process by raising issues for discussion and consideration and educating policymakers on the implications and advantages of supporting the pursuit of wellbeing and health.[2]

Inclusion of content on: paradigms of health; wellbeing and disease; non-communicable diseases; lifestyle medicine; epigenetics; positive psychology and positive organisational scholarship; metainflammation; gut microbiota; and the implications of new and emerging approaches to health, in terms of individuals, organisations and the delivery of healthcare and the latest research in health care professionals training, would all help heighten awareness of the potential benefits for their patients.

The HSE established *Making Every Contact Count* in 2016 to support the implementation of Healthy Ireland in health services and help people make healthier lifestyle choices. Through the programme, health professionals will support patients to make healthier lifestyle choices.

Healthcare professionals are being asked to take the opportunity during their daily contact with patients and service users to support patients in making lifestyle choices that help prevent chronic diseases and promote self-management of existing chronic diseases. Full training is provided for healthcare professionals.

Dan Buettner, a New York Times journalist, has identified five blue zones globally where people live beyond a hundred years old: Okinawa; Sardinia; California; Costa Roca; and Greece. They not only live beyond one hundred but live in total health. Other areas are emerging, but the research spans twenty years. Just as Seligman looked to see what the happy people were doing in psychology, this area is exciting to watch as research emerges and enables us take examples from these communities.[22]

"The doctor of the future will give no medicine, but will instruct his patient in the care of the human frame, in diet and in the cause and prevention of disease."

These are the words of Thomas Edison over 100 years ago.

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This article is based on a series of lectures Siobhan has delivered to dental professionals.

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Hypertension understanding the condition to help our patients improve their oral health

by HARRIET ELSWORTHY

AIM

To provide an overview of current evidence relating to hypertension, and explore how knowledge of this condition is becoming increasingly relevant to dental professionals.

LEARNING OBJECTIVES

- Revisit epidemiology, pathophysiology and risk factors of hypertension
- Examine the mechanisms by which hypertension and periodontal diseases may be linked
- Analyse current research investigating the relationship between blood pressure and periodontal diseases
- Assess the practical application of this knowledge in a dental setting

LEARNING OUTCOMES

To understand:

- The basics of hypertension as a condition
- The possible mechanism of association with periodontal diseases and inflammation and the extent to which this is supported by current evidence
- The role of screening for hypertension in the dental setting

Aligned with GDC development outcome: C

To obtain an hour of CPD for this paper scan the QR code or follow the link:
HTTPS://WWW.SURVEYMONKEY.CO.UK/R/DHJAN2023

Closing date for submissions: 28 February 2023

ABSTRACT

Population growth and an overall ageing demographic have contributed to a doubling in global rates of hypertension since 1990.[1] It is therefore likely that dental professionals will increasingly encounter patients suffering from hypertension in their daily practice. Side effects of antihypertensive medications, local anaesthetic choice and risk of medical emergency are already considerations when treating a patient with high blood pressure. With emerging evidence suggesting that the prevalence of hypertension is higher in patients with periodontitis than those without, and the additional possibility that management of periodontal inflammation may have a positive effect on arterial blood pressure, the dental professional's understanding of the condition is becoming increasingly relevant.

KEY WORDS

Hypertension, blood pressure, periodontitis, periodontal diseases, blood pressure screening

Epidemiology

Hypertension, or elevated blood pressure, occurs when the force exerted on the artery walls by circulating blood is too high.[2] Diagnosis of hypertension is dependent on an individual's blood pressure being above the level of blood pressure (BP) at which the benefits of treatment outweigh the risks of treatment.[3,4] Current international guidelines state that this threshold is ≥ 140mmHg for systolic blood pressure (SBP) and/ or when diastolic pressure is measured at ≥ 90mmHg in repeated in-office readings.[5]

In 2019, 23-29% of people aged between 30-79 in the UK were estimated to have high blood pressure. Systolic blood pressure (SBP) of at least 110-115 mmHg contributed to 10.8 million deaths worldwide in 2019, surpassing smoking as a

risk factor for attributable deaths.[6] Hypertension is also the leading cause of cardiovascular diseases (CVDs), which are the leading cause of mortality globally, accounting for 32% of all deaths in 2019. Hypertension thus poses a substantial global burden of disability and premature mortality.[6,7]

It is interesting to note that although the current International Society of Hypertension guidelines define hypertension as ≥140/90mmHg, the theoretical minimum-risk exposure level has actually been estimated to range between 110-115 mmHg for SBP, as risk of mortality escalates when SBP increases above this point.[8] Despite this, blood pressure ≥140/90mmHg in particular does contribute significantly to global deaths and in 2015 was estimated to be attributed to 14% of all deaths globally.[9]

Elevated SBP (≥110-115mgHg) has been demonstrated to be distinctly and independently associated with increased risk of many diseases, including ischaemic heart disease and stroke, haemorrhagic stroke, hypertensive heart disease, cardiomyopathy, atrial fibrillation, aortic aneurism, peripheral vascular disease, chronic kidney disease and end-stage renal disease.[8,10]

Pathophysiology

Hypertension has no exact single cause in most cases, as the development of primary or 'essential' hypertension is likely to be the result of derangement of any of the many physiological mechanisms which normally maintain normal blood pressure.[11] These include:

- Sodium and fluid imbalance[12]
- Obesity and insulin resistance[13]
- Renin-angiotensin-aldosterone system - Renin secreted by the kidneys which converts angiotensinogen to angiotensin I, which is then converted into angiotensin II in the lungs - this causes vasoconstriction[11]
- Sympathetic nervous system - stimulation can cause arteriolar constriction and dilation[11]
- Endothelial dysfunction[11]

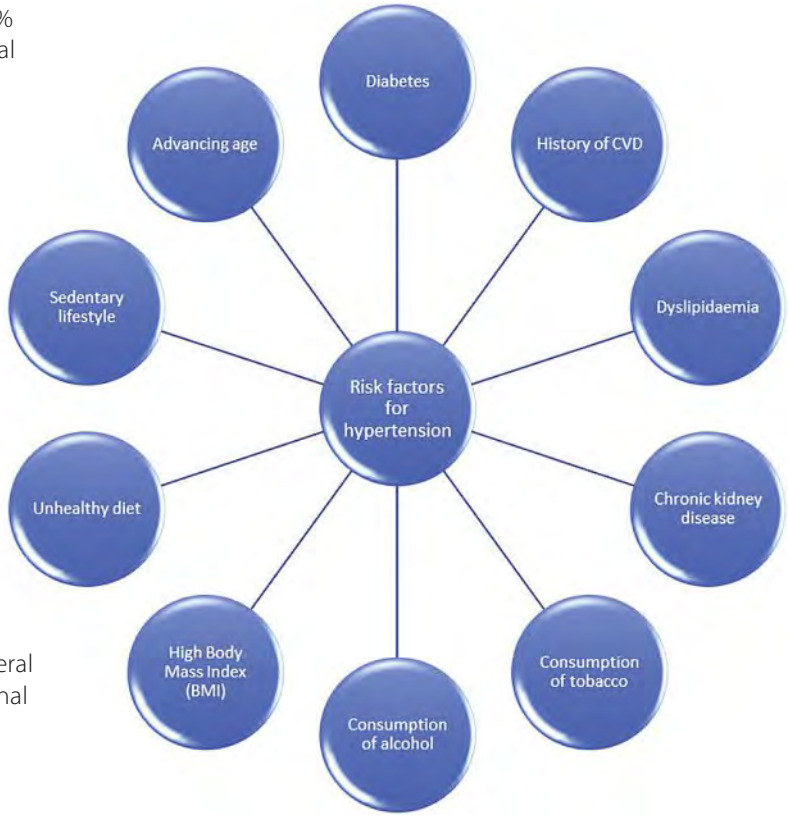
Secondary hypertension occurs in 5-10% of hypertensive patients, where hypertension can be attributed to a specific cause, most commonly renal or adrenal disease, or sleep apnoea.[5,14]

Risk factors

Presence of risk factors significantly impacts prevalence of hypertension - over half of patients with hypertension have additional cardiovascular risk factors. See Figure 1 for the most significant risk factors for hypertension.[3,5,15]

Many of these risk factors will be familiar as being shared risk factors or risk indicators for periodontitis. Presence of one or more of the above risk factors in periodontitis may affect the course of disease. Furthermore, periodontitis has

Figure 1: **Risk factors for hypertension**



a suggested causal role in many systemic diseases, including CVD, hypertension, and diabetes, although further evidence is required to substantiate these observations.[16-19] Similarly, a large proportion of hypertensive patients also have comorbidities which further increase the risk of CVD, many of which are shared with periodontitis, particularly a group of metabolic factors including elevated blood pressure, impaired glucose regulation, dyslipidaemia and obesity.[20-22]

Mechanisms of association between hypertension and periodontitis

Preliminary evidence shows a causal relationship between periodontitis and hypertension, although the specific mechanisms of this relationship are unclear.[16] It is known that periodontitis may affect endothelial function - a known contributor to the development of hypertension - partly due to increased C-reactive protein (CRP), TNF-α, IFN-γ, IL-6 and IL-17 levels, all of which are also associated with systemic inflammation. Endothelial function may also be impaired by periodontal pathogen bacteraemia occurring in periodontitis.[23-25] Periodontitis may also facilitate activated subsets of T cells, particularly CD8 and Th17 cells, monocytes, and some B cells, to accumulate within perivascular tissue and contribute to the pathomechanism of hypertension.[25-26]

Evidence has shown that inflammatory and metabolic markers are both raised in patients with severe periodontitis; an increase in circulating leukocytes, resistin and plasma glucose levels, dyslipidaemia, and elevations in CRP, many of which are also demonstrated in patients with hypertension, obesity and diabetes.[20,22-23,27-29] It is hypothesised therefore that pathophysiological mechanisms of the association

between periodontitis and metabolic syndrome may be related to systemic low-grade inflammation or oxidative stress.[25,27,30-32]

Supporting evidence

The trend of much available literature supports a significant association between periodontitis and elevated BP, which becomes more substantial with more severe cases of disease. [16,25-26,30,33-35]

A recent systematic review and meta-analysis of 40 studies demonstrated an increased prevalence of periodontitis in hypertensive patients with SBP ≥140 mmHg and DBP ≥90 mmHg and a positive linear association between periodontitis and hypertension.[25] It was found that patients with moderate to severe, or severe periodontitis, had 20-50% higher odds of also having hypertension, in comparison with patients without periodontitis. Furthermore, there is an additional possibility that stabilisation of periodontitis could affect the management of hypertension.[25,36,37] A large cross-sectional study in Korea, which retrospectively assessed dental and medical records of a random sample of over one million citizens, also found significant positive correlations between periodontitis and hypertension (defined as ≥140/90mmHg) (OR 1.07, 95%CI 1.05-1.08, p<0.001) after adjusting for eight lifestyle-related comorbidities.[38]

A dose-response relationship of BP with % BOP has also been observed, indicating that concurrent increase in BP occurs as the area of inflamed tissue increases. [30,33-35,39-41] Tsakos and colleagues (2010)[35] examined data from 11,948 individuals taken from the NHANES III study; this showed that after full adjustment for many biological and socio-economic factors, there remained a significant association between % BOP and SBP. Furthermore, the same study found that with every 10% greater % BOP, the average SBP increased by 0.5mmHg (95% CI 0.3-0.6mmHg).

Some emerging evidence suggests management of periodontitis may positively impact BP. [25,30,33-35,40,42] A randomised controlled trial in 2017 assessed the effect of intensive periodontal therapy on BP in 95 pre-hypertensive participants with periodontitis; both SBP and DBP had significantly reduced in the group having undergone treatment when compared with the control group six months following therapy. The conclusion reached by the authors stated that periodontal treatment without antihypertensives may be an effective means of lowering BP.[43]

This body of evidence implies that the large proportion of patients who have some degree of periodontal inflammation could potentially have this identified and treated as a modifiable risk factor for hypertension, as well as those with periodontitis potentially being at greater risk of being hypertensive. Rationale for the role of the dental professional managing this in the dental setting has already been suggested.[44] This leads us to explore the practical role dental professionals could potentially undertake, by not only using our role in identifying and educating about periodontal disease, but also through screening for patients with undetected or poorly controlled hypertension.

Screening for hypertension

Dental professionals are well placed to potentially screen a large proportion of the population for hypertension as part of routine dental appointments. With the high prevalence not only globally, but also in the UK, of undiagnosed and untreated hypertension, this could be beneficial in improving detection, treatment and ultimately the burden of hypertension from an individual up to an international level.

The goal of reducing global prevalence of raised blood pressure by 25% between 2010 and 2025 was set in the WHO's "Global action plan for the prevention and control of NCDs 2013-2020."[45] For every 10 mmHg reduction in SBP achieved in an individual, risk of CVD events reduces by 20% and stroke by 27%[46] and therefore anti-hypertensive measures, starting with screening, are crucial in reducing the burden of hypertension related disease and disability.

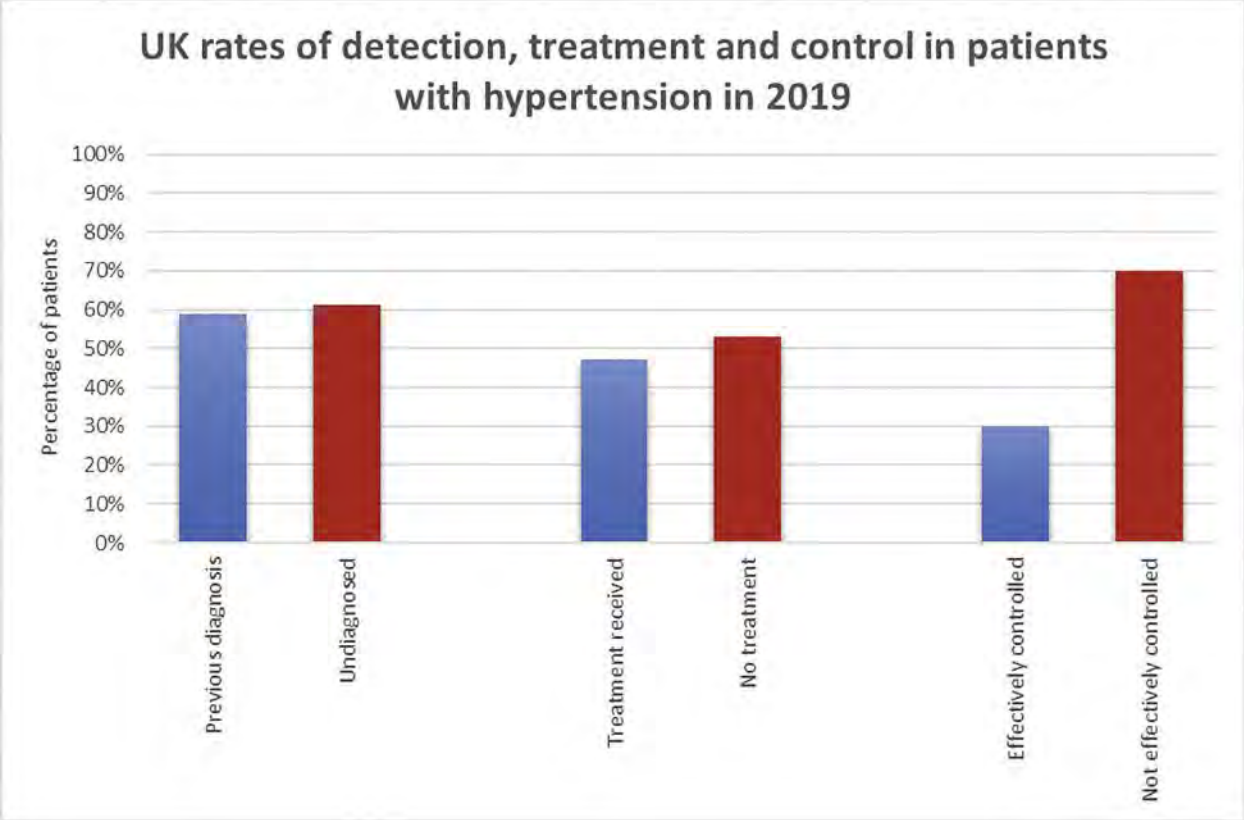
Global rates of undiagnosed hypertension are substantial. In 2019 an estimated 40.5% of men and 41.6% of women aged 30-79 with hypertension (classified as having SBP ≥140 mmHg, DBP ≥ 90 mmHg or taking medication for hypertension) did not report any previous diagnosis.[1] An average of 53% of people with hypertension were not receiving treatment for it, and an average of 70% of people receiving treatment had not achieved effective control of their blood pressure.[1] These figures are summarised in Figure 2.

There have been several studies worldwide investigating the relevance of screening for hypertension in the dental environment, finding the prevalence of hypertension in this setting to be between 15.5-39% and highlighting the potential for this as an effective public health measure. [39,47-55] A study carried out in dental clinics in Spain, revealed that 73.33% of participants found to have BP indicative of hypertension had not been previously diagnosed. [50] A pilot study carried out in a city dental clinic in London, UK discovered that 82% of patients with BP indicative of hypertension reported no previous diagnosis from their GP. [48]

Willingness to undertake screening has been shown to be promising from professionals and patients alike; a survey conducted in the United States demonstrated that 90.8% of 1945 dentists asked would be willing to take BP readings during a dental appointment; and there appears to be a generally positive attitude from both health authorities and the public towards screening for medical conditions in the dental setting.[56-59] However, UK based research on this is sparse and seems to show a lesser willingness from clinicians to participate in BP screening.[60] A relatively small pool of GDPs based in North East England responded to a questionnaire; while 98.1% of the GDPs had received training on BP measurement, only 27.1% felt that their participation in hypertension screening was a good idea, despite the majority already having access to the necessary equipment in practice. A reported reason was lack of NHS funding for this, although the author speculated that professional boundaries may be crossed invoking hostility from either the patient or GP.[60]

Time limitations, driven by financial targets, also posed a significant barrier to the practical aspect of screening. To

Figure 2: **Estimated global and UK rates of detection, treatment and control in patients with hypertension in 2019. Mean of men and women aged 30-79 years [1]**



this end, the author took part in a multi-centre study as part of MSc research earlier this year, to investigate the merit of hypertension screening in private dental practices. Blood pressure was taken from patients during their dental appointments; there were certainly barriers to the screening process in this environment, however these could be overcome by organisation and training other members of staff. Results will be published by University College London in the near future.

Some studies have raised the possibility of white coat hypertension and dental anxiety of participants affecting the prevalence of elevated BP found in this environment. However, several similar studies did use measures to identify and reduce the risk of dental anxiety confounding prevalence of elevated BP and none found a notable impact on their results, indicating that the white coat effect is limited.[48,53-54]

Conclusion

Evidence shows a significant proportion of patients who are unaware of their continuing and possibly increasing risk for mortality and morbidity through elevated BP indicates that screening in the dental practice may be an effective means of detecting undiagnosed and poorly controlled hypertension. Utilising this opportunity may have the potential to reduce both national and international burden of disease currently attributed to hypertension.

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SUSTAINABILITY A SPOTLIGHT ON DIET

by SUE JONES

Introduction

This article highlights the main drivers of biodiversity loss: animal agriculture and overfishing. It suggests that, as dental professionals, we are well placed to include sustainable options as part of the dietary advice we give to patients.[1] In particular, the promotion of flexitarian or plant-based diets which can be much healthier for people and the planet. An article entitled, 'Health Sector Solutions for Promoting Sustainable and Nutritious Diets' published in the British Medical Journal in September 2022, argues that reducing meat consumption (especially red and processed meat) will be necessary to meet future nutritional needs whilst also protecting the health of the planet. The author calls for a shift in the traditional clinical approach to food and nutrition and suggests that sustainable dietary guidelines will be best advocated by public health, academia and healthcare systems.[2]

Problems caused by animal agriculture

In our oceans

Maintaining ocean health is vital; a significant proportion of the entire human and animal food chain comes from our oceans. However, global seafood production has quadrupled over the last fifty years and has been described as one of the biggest environmental problems of our lifetime. Industrial overfishing is severely depleting global fish stocks and some of the methods used are highly damaging to our oceans.[3]

On Land

Animal agriculture depletes trees and forests, which are cleared to provide grazing or to grow animal feed crops such as soy and maize. Most of the food grown and transported around the world is to feed farmed animals. More than 70% of the world's soya crop is grown as animal feed.[4]

It has been argued that the biggest population crisis is not the growth in human numbers but the growth in livestock numbers. Furthermore, the primary cause of river pollution in the UK today is animal farming.[5]

The impact of eating a diet based around meat (especially red and processed meat) and dairy, increases the risk of diseases such as diabetes, heart disease and some types of cancer in humans.[6,7] Furthermore, many species of fish,

once considered the healthy choice, are now considered too polluted to eat.[8]

Antibiotics

The World Health Organisation warns that a post antibiotic era is near: the biggest threat to global health.[9] Humans will be at a greater risk of dying from once treatable infections due to our overuse of antibiotics. As dental professionals, we are all too aware of the need for judicious and minimal prescribing of antibiotics. However, most of the antibiotics used are those given routinely and constantly to animals living in cramped conditions on factory farms. Globally, two thirds of antibiotics are used for livestock.[10]

Sustainability is holistic

Sustainability is about protecting and preserving a liveable planet for generations to come. It is, by definition, a holistic concept and much in the same way as we cannot separate our patient's oral health from their overall health, we cannot separate sustainability in dentistry from sustainability in general.

We do ourselves and our patients a great disservice if we do not widen our understanding of sustainability to think of much more than simply how much paper we save, how much re-cycling we do and what plastic free products we stock.

Climate change and biodiversity loss are inter-related. Whilst we need to globally limit the emission of greenhouse gasses - which warm the planet causing weather systems to change and polar ice caps and permafrost to melt – we must ensure that we do not kill, directly or indirectly, wildlife to the point of extinction, resulting in a collapse in biodiversity.

According to the research team at 'Earth-Day' we are living through a mass extinction event and are losing 10,000 times more species per year than the normal rate. Insects have declined globally by 40%. Wild animals have declined by 70%. More than 650,000 marine mammals are caught or seriously injured every year (300,000 of which are killed accidentally every year by fishing trawlers). Grassland birds have declined by 74%.[11]

Consider what we eat

To quote from the EAT-Lancet planetary diet guidelines: "to improve the health of 10 billion people by 2050, we need to double the consumption of healthy foods such as fruits, vegetables, legumes and nuts and at least halve global consumption of less healthy foods such as sugars and red meat."[12]

Given that changing the way we eat is undoubtedly an important shift towards a sustainable future, it could be a natural extension of discussions around sugar and a healthy diet. As with smoking cessation advice, we in dentistry are perfectly placed to have these sorts of discussions with our patients. Making simple changes is well within the capabilities of most people. It does not have to mean giving up meat, fish and dairy entirely, but rather shifting towards flexitarian or plant-based eating which can be easy, cheap and often healthier than a meat-based diet.

Some nutrition basics

The generally accepted medical view is that we need meat, fish (especially oily fish) and dairy as an essential part of a healthy diet. The truth is that we do not. What we need is protein, minerals, vitamins and essential fatty acids. All of which we can find in a flexitarian or well-planned plant-based diet.[15] Fewer plant sources contain all nine essential amino acids, but this simply means ensuring that a wide variety of plant protein sources are eaten. Reducing meat consumption, especially red meat, can result in difficulties for some people obtaining and absorbing iron (heme and non-heme). Whilst there are plenty of non-heme iron-rich plant sources, the iron may not be as readily absorbed by the body. Therefore, those wishing to reduce meat and fish must include plenty of plant foods rich in iron, preferably eaten alongside foods containing vitamin C that aid its absorption.[13]

Those who do not eat oily fish - containing complex DHA molecular chains of omega 3 - should eat plenty of foods containing ALA omega 3, such as flax or chia seeds, as the more complex chains are made within the body from the ALA sources. However, an individual's ability to make complex chains may be limited and declines with age, therefore older people should be advised to take a supplement for DHA omega 3 if they choose not to eat oily fish.[14]

However, for the vast majority of people, a varied flexitarian or plant-based diet of fruits, vegetables - especially green leafy vegetables - beans, peas, nuts, seeds and wholegrains - such as brown rice and wholewheat - with greatly reduced amounts of meat, fish and dairy products can provide all the nutrients required for health at every stage of life.[15]

Individuals choosing to follow a wholly plant-based diet should plan their diets more carefully and supplement with

Continued...

Sustainability: A Spotlight on Diet

vitamins and minerals that may be deficient, such as vitamin B12, omega 3 (DHA) and iron.

Solutions

Whilst it is perfectly possible to remain in optimum health on a fully plant-based diet, a complete rejection of all animal products would be undesirable or impossible for many people and, without proper education, could leave patients at risk of nutritional deficiencies. Some animal farming can indeed be beneficial, providing nutrients for the soil in the form of manure. Animals will continue to be farmed for their meat in the future, albeit probably on a much smaller scale.

This will be much better for the animals themselves whilst also re-establishing the environmental positives of animal agriculture. Meat will become more expensive but the welfare and quality will be much improved and it will be eaten much less frequently which, in turn, will be healthier for us.

At the very least, a shift towards halving our consumption would reduce the need for factory farms where overcrowding and disease – not to mention acute suffering - are rife. This would reduce the use of antibiotics. A shift would lessen the amount of land and water needed to grow animal feed and reduce the amount of industrial fishing decimating wildlife in the oceans. It would also reduce pollution and greenhouse gas emissions. Furthermore, such a shift may reduce the incidence of diseases associated with diets based around animal products.

The World-Wide Fund for Nature has produced new guidelines around diet which we in dentistry could use as a starting point. Called 'Eat4Change,' they provide suggestions to make healthy but simple swaps at meal times and help people to see how they can easily enjoy their favourite meals without meat, fish or dairy. They include suggestions such as: replacing chicken with chickpeas and vegetables in a curry; replacing beef or pork with tofu and nuts in a stir fry; using green lentils and vegetables instead of beef mince in a cottage pie or spaghetti bolognese; replacing ham with sundried tomatoes, olives and walnuts in a salad; trying a barista style plant milk in coffee; or a plant butter on morning toast.[16]

It does not have to be all or nothing! However, it does have to be considerably more than it is now if we want to preserve a liveable planet for future generations.

Conclusion

Initiatives in dentistry that aim to reduce plastic, paper and pollution within our practices are to be welcomed. But the time has come to adopt a more holistic view. It is time to fully recognise and address the problem of heavy animal-based western diets and to devise methods that inform, educate and encourage patients to make sustainable dietary choices.

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AN UPDATE ON THE EFFICACY OF MOUTHWASH USE

On the morning of 10th October, Johnson & Johnson Ltd., the makers of Listerine®, hosted a press briefing at Ogilvy & Mather Sea Containers in London to provide an update on the efficacy of mouthwash use.

The event was chaired by Professor Iain Chapple, Professor of Periodontology and Consultant in Restorative Dentistry, Birmingham UK, who explored why it is time to take gingivitis seriously, focusing on the human, economic and societal cost of periodontal disease.

Adding to Prof. Chapple's insight were presentations from:

- Professor Elena Figuero, Full-Professor in Periodontology at the University Complutense of Madrid (Spain), who joined via video link to discuss the efficacy of adjunctive therapies in reducing plaque by means of a systematic review of randomised clinical trials,[1,2] who said:

  'The overall idea that should be kept in mind is that higher biofilm reductions might be achieved when antiseptics are used as an adjunct to self-performed mechanical biofilm control procedures (toothbrushing or interdental devices) compared to these same mechanical procedures alone.'

- Benjamin Tighe, a dental therapist in private practice and a Tutor Dental Therapist at The Eastman Dental Hospital, who spoke about his experience of recommending mouthwash for plaque management purposes in practice.

- Soha Dattani, a periodontist and Head of Professional at Johnson & Johnson, who shared the latest data from new Johnson & Johnson trials, which were peer reviewed and published in the American 'Journal of Dental Hygiene' earlier this year.[3,4]

This invaluable meeting served as the culmination of 12 months of activity for Johnson and Johnson Ltd., which involved both the National Advisory Panel and Hygienist Advisory Panel gatherings and their subsequent consensuses statements on mouthwash use, as well as the dissemination of new data revealing how to tackle interproximal plaque with essential oils-based LISTERINE®.[3,4]

Bringing all of these threads together for a full overview, the results from the peer reviewed studies were shared. The published results report that for patients who brush and floss, adding LISTERINE® reduces interproximal plaque by 28.4% versus brushing and flossing alone.*[4] And, for those who don't floss, adjunctive use of LISTERINE® reduced interproximal plaque above the gumline by 4.6x versus floss.**[3]

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*** Sustained plaque reduction above the gumline with continual twice daily use for 12 weeks after a dental cleaning. Flossing was performed by a dental hygienist.*

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CLINICAL QUIZ

A male patient, in his fifties, who you know from his social history to be a recovering alcoholic, attends after a few years gap for care under direct access arrangements. He brings a walkie-talkie into the treatment room which he reports is connected to a friend. The friend is in the waiting room and is highly critical of your advice and treatment plan to your reception team while your patient is paying. He pays in cash that he has to ask the friend for, explaining that the friend takes care of his finances.

Q1. What action, if any, would you take?

A child attends for routine preventive care. It has been several months since she had an examination, with several WNB annotations in her record and, you note, several new carious lesions. She has a large bruise on her cheek, which she claims to have sustained by walking into a door.

Q2. What does WNB stand for?

Q3. What action if any would you take?

Q4: As a practising clinician, what level of safeguarding training should you have attained and how often should you revisit that training?

Image courtesy of Piqsels

SEND YOUR ANSWERS TO THE EDITOR BY 28TH FEBUARY

Email: editor@bsdht.org.uk **Postal:** The Editor, Dental Health, BSDHT, Bragborough Hall Business Centre, Welton Road, Braunston NN11 7JG.

ANSWERS TO CLINICAL QUIZ NOVEMBER 2022

The winner is: **Osian Davies**

Q1. What would be your initial approach to treating this child?

A1. Be kind and patient, try to build rapport and win the trust of both the child and the parents. Use tell-show-do techniques and positive verbal communication.

If the child is cooperative, and can cope, apply fluoride varnish allowing them to choose the flavour. Advise the parents to brush their child's teeth with a toothpaste with a high concentration of fluoride and adopt a spit-don't rinse technique. It is important to explain that fluorosis is likely in the permanent teeth. Diet advice is essential.

Q2. What would you treatment plan for this young child at subsequent appointments?

A2. Continue to build a relationship and manage the dentition with restorative and preventative techniques. Referral to a paediatric or community dental services could be considered.

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The powder jet handpiece is available with two interchangeable sub and supra nozzles, easily swapped mid treatment

The handpiece is fully portable and runs off standard high speed couplings, allowing easy movement between surgeries

The advanced powder is completely water soluble – no residue is left in the patient's mouth, the handpiece or the suction unit

For more information visit **www.duerrdental.com/en/products/dental-care/**

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DÜRR DENTAL

ANTI-STAINING CHLORHEXIDINE

CLINICALLY EFFICACY TESTED

With the unique and patented formula of **Curasept ADS Perio Pro Oral Rinse** - you can provide your valued patients with all of the benefits of **0.12% CHX** but with dramatically reduced tooth discolouration and taste disruption.

- Designed specifically for the prolonged treatment of gingivitis, periodontitis and peri-implantitis
- Contains **Hyaluronic acid** and sodium **DNA** to soothe the gingiva and protect it from irritations, reduce inflammation and boost tissue healing and repair
- Alcohol free and SLS free
- Designed to work in synergy with **Curasept ADS 712 Toothpaste** and **Curasept ADS Regenerating Gel**
- Achieve **maximum patient compliance** and **optimum treatment outcomes**

Scan the QR code for more information and samples

How to Order

Orders can be placed through your usual dental dealer or by contacting J&S Davis directly:

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