

Volume 68 Number 2 April/May 2022

Journal of the Irish Dental Association

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Ronan King



 Getting to grips with social media

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and new challenges





Effective prevention for patients at increased caries risk*

• 5000 ppm Fluoride Toothpaste **prevents cavities** by **arresting and reversing** primary root and early fissure **caries lesions**²⁻⁵

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Compared to generic 5000 ppm high fluoride toothpaste. * Patients ≥ 16 years at increased caries risk. ** Colgate UK Consumer Survey on Cosmetic Toothpaste. 504 participants. Feb 2020. † YouGov Omnibus for Colgate® UK, data on file June 2015. Claim applies only to the Colgate® brand.

References: 1. Data on file. Preference Survey. January 2020 (n=82). 2. Baysan A et al. Caries Res 2001;35:41-46. 3. Schirrmeister JF et al. Am J Dent 2007;20. 212-216. 4. Ekstrand et al. Geodent 2008;25:67-75. 5. Ekstrand et al. Caries Res 2013;47:391-8.

Name of the medicinal product: Duraphat® 5000 ppm Fluoride Toothpaste. Active ingredient: Sodium Fluoride 1.1 %w/w (5000 ppm F). 1g of toothpaste contains 5mg fluoride (as sodium fluoride), corresponding to 5000 ppm fluoride. Indications: For the prevention of dental caries in adolescents and adults 16 years of age and over, particularly amongst patients at risk from multiple caries (coronal and/or root caries). Dosage and administration: Brush carefully on a daily basis applying a 2cm ribbon onto the toothbrush for each brushing, 3 times daily, after each meal. Contraindications: This medicinal product must not be used in cases of hypersensitivity to the active substance or to any of the excipients. Special warmings and precautions for use: An increased number of potential fluoride sources may lead to fluorosis. Before using fluoride medicines such as Duraphat, an assessment of overall fluoride intake should be done. Fluoride tablets, drops, chewing gum, gels or varnishes and fluoridated water or salt should be avoided during use of Duraphat Toothpaste. When carrying out overall calculations of the recommended fluoride ion intake, which is 0.05mg/kg per day from all sources, not exceeding 1mg per day, allowance must be made for possible ingestion of toothpaste (each tube of Duraphat 500mg/100g Toothpaste contains 255mg of fluoride ions). This product contains Sodium Benzoate. Sodium Benzoate is a mild irritant to the skin, eyes and mucous membrane. Undesirable effects: Gastrointestinal disorders: Frequency not known (cannot be estimated from the available data): Burning oral sensation. Immune system disorders: Rare (21/10,000 to 1/1,000): Hypersensitivity reactions. PDM. Marketing authorisation number: PA 0320/0036/002. Marketing authorisation holder: Colgate-Palmolive (U.K.) Ltd. Guildford Business Park, Midleton Road, Guildford, Surrey, GU2 BJZ. Recommended retail price: €9.36 (51g tube). Date of revision of text: April 2015.





Connections and learning

The need for connections, and the business of turning knowledge into practice, are central to this edition.

It has been two years since Covid-19 arrived in Ireland and we could not have known that our lives would be impacted for so long. And just when things start to brighten up with high vaccination rates and the lifting of restrictions, we see the world taking another turn towards uncertainty, fear and lack of hope. I have been talking to many people who have said they feel a sense of disconnect, even though we have never been more connected, albeit virtually.

The IDA Annual Conference is coming at a time when we are really craving social interaction and face-to-face contact. It brings us an outstanding programme, and will give us the opportunity to meet old friends, make new ones, and re-establish our networks in a more meaningful way. It is about time we reconnected.

Translating knowledge into practice

The last decades have seen an explosion of information. From 2003 to 2012, the total number of publications in dental journals more than doubled from 4,727 to 10,102 papers. In the same period, the total number of dental journals increased significantly from 46 to 83.1 In the biomedical field alone, it is estimated that more than one million papers pour into the PubMed database each year — about two papers per minute.2

It would be reasonable to assume that once access to evidence is gained, this will be translated into practice immediately. However, this does not seem to be the case as there is plenty of evidence to show that knowledge transfer is a much more complex process, which occurs slowly and sporadically.

In dentistry, a good example of this failure to transfer knowledge into practice can be seen in the treatment of carious lesions. The invasive (operative) management of enamel lesions is not supported by evidence and is no longer recommended. Despite this, studies worldwide point to the fact that 40-80% of dentists would still choose to use the drill, and remove tooth structure in the treatment of these lesions.

The reasons for this gap between evidence and practice are many, with several factors from professionals, to patients, remuneration systems and policies. Some authors have summarised the problems with translational research into three categories: 'don't know', 'can't do' or 'won't change'. It has been suggested that an essential starting point of managing the problem of 'don't know' is the availability of high-quality, evidence-based guidance on best clinical practice.3



Clinical tips

I am delighted to introduce a new series of short articles, which will provide tips on new techniques, dental materials, patient management, etc. The idea is to provide practitioners with evidence-based, summarised clinical guidance that can be easily read, digested and applied in practice. Dr Graham Quilligan has contributed the first article of the series, giving readers excellent tips on the use of the apex locator.

Submissions of clinical tips and also suggestions on topics to be covered in this section are more than welcome.

Gerodontology series

This issue also brings a new series on the treatment of older patients. With the increase in life expectancy and tooth retention, it is becoming more and more common to see senior individuals looking for dental treatment that goes beyond simple denture provision, and this brings many challenges to practitioners. These patients, besides presenting with high levels of caries and periodontal disease, may have comorbidities and limitations to a more conventional treatment plan. The first article, by Prof. Finbarr Allen, discusses general concepts in treatment planning for older patients and the importance of a comprehensive assessment of patients' risk, including factors such as general health, polypharmacy, dependency status, and their ability to maintain oral health.

I recommend it (and all of the contents of this Journal) to you, and hope to see as many of you as possible in Galway.

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 Araujo M W B et al. Meta-analysis of the effect of an essential-oi containing mouth rinse on gingivitis and plaque. JADA 2015;
 146:610-622



Positive developments

In-person meetings have recommenced, and there is a Ministerial pledge to intervene with the DTSS crisis.

Our first in-person Practice Management Seminar since restrictions were lifted was held at the end of March, and was a great success. It was fantastic to see so many colleagues gathered to hear our excellent speakers, who took a wideranging look at the state of dentistry in Ireland, now and in the future. Topics included a presentation from Matheson on the various business models available to dentists, which was of particular interest in light of Revenue's proposal to levy VAT on fees paid by associates to principals. The Seminar also featured a panel discussion chaired by former RTÉ Industry and Employment Correspondent Ingrid Miley on 'Dentistry 2022: New challenges, new priorities, new ways of working', which discussed issues from recruitment to social media. The business of dentistry is changing, and it is incumbent on all of us to inform ourselves and meet the challenges to come.

I am also looking forward very much to returning to Galway in May for our Annual Conference. A truly outstanding line-up of speakers will give us the benefit of their expertise, and we will once again host our trade show, where the best of the dental industry will be on display. Perhaps most importantly, however, after the last two years, it will be a fantastic opportunity to meet old and new friends, and to socialise together once again. We hope for a great turnout this year, so be sure to register for 'Re-connect'.

Ongoing issues

The latest planned meeting with Revenue on the VAT issue unfortunately had to be cancelled due to Covid-19; however, we hope to reschedule it soon and resume discussions on this very important issue. It is too soon to say whether progress can be achieved but at a minimum it is heartening to see a willingness on Revenue's part to engage in discussions with the Association, and we hope this will lead to a solution that is good for dentists and their patients.

In relation to the ongoing crisis in the DTSS, the Minister for Health, Stephen Donnelly TD, recently announced in the Dáil that he has given approval for "significant fee increases" to contracted dentists across a number of items, including dental examinations and fillings.

The Minister said he had also approved the reintroduction of scale and polish for medical card patients on the DTSS. The IDA has informed the Department of Health that any funds for fee increases should apply to bridging the gap between current fees and the costs incurred by dentists in providing these existing treatments, rather than also being used to fund the restoration of



treatments (such as scale and polish) at fee levels well below the costs incurred by dentists in providing these treatments. The Association's position remains that the problems with the medical card scheme will only be solved by its replacement with an entirely new model of care compatible with independent dental practice.

The Minister says that the proposed measures will amount to an increase of €26 million over 2021 expenditure on the Scheme, albeit the spend in 2021 was less than half of that in 2009. He also stated that work on a substantive review of the DTSS contract will commence at the end of Q2, 2022. The IDA is, as ever, more than willing to engage with the Department and the HSE, to contribute to the development of a new and better scheme under an independent chair and with agreed terms of engagement.

Goodbye and thank you

As this is my last message as IDA President, I would like to take this opportunity to say how much I have enjoyed the role, and to thank the team at the IDA for their support during the year. Working with them was one of the high points of my Presidency and I couldn't have done it without them.

It has been a fascinating year, and I enjoyed meeting and engaging in discussions with stakeholders from a range of backgrounds, from my fellow dentists, to officials from Revenue and the Department of Health, and indeed to working with Think Media. Another high point was the opportunity to travel to Belfast to meet colleagues from the British Dental Association Northern Ireland (BDA NI). We share a centenary with the BDA NI next year, and we hope that the two organisations will collaborate to celebrate this historic occasion.

I also want to thank the IDA's Management Committee and Council, and all those who serve on committees within the Association. I would strongly encourage members to get involved by joining a committee. It is your chance to contribute to your Association, and is also very personally fulfilling.

Finally, I extend my very best wishes to Dr Caroline Robins as she takes up the role of President and wish her all the best for the year to come.

As this Journal went to press, we were truly saddened to learn of the untimely passing of Fionnuala O'Brien, who was a dedicated member of staff at IDA House, in particular as Journal Co-ordinator, for many years. Our heartfelt condolences go to her family and friends. Ar dheis Dé go raibh a hanam dílis.

Quiz

Submitted by Dr Andoni Jones.

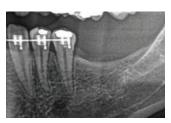




FIGURE 1.

FIGURE 2.

A 40-year-old male patient with a long history of edentulism wishes to replace the missing LL6 and LL7 with implants (Figures 1 and 2).

Questions 1.

Is an OPG enough to assess the bone anatomy and complete a correct diagnosis?

- 2. What soft tissue characteristics must be addressed?
- 3. What is a key factor for crestal bone preservation around dental implants?

Answers on page 97

Discounts for IDA members

AED/defibrillator

The Dental Council will be announcing new guidelines very soon for medical emergencies in the dental setting. All dental practices will be advised to have an AED/defibrillator on the premises. The IDA has negotiated a preferential rate for members to purchase an AED from Heart Safety. Contact Dave Greville on 1850 432 787, or at info@hearts.ie, with proof of your 2022 IDA membership.

Medical oxygen

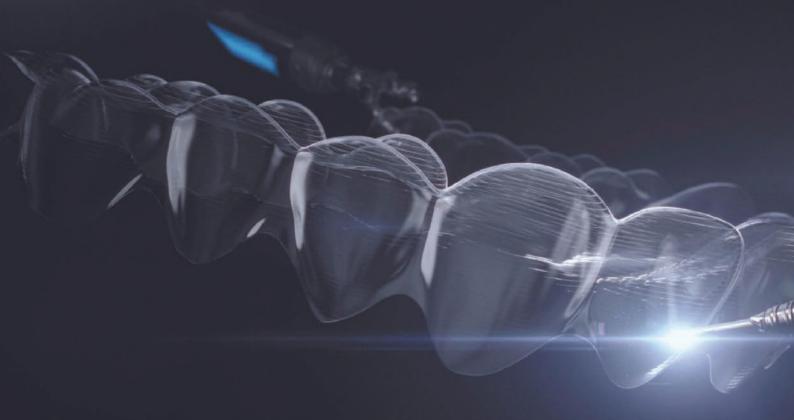
The IDA has negotiated a discount for members on medical oxygen and refills for dental practices. Contact Pat Crowley at Irish Oxygen on 021-454 1821, showing proof of your 2022 IDA membership.

IDA webinars autumn/winter series 2022

Are you interested in giving a lecture/presentation to IDA members? The CPD Committee is currently putting together the autumn/winter series of webinars and if you are interested in giving a presentation, then please



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^{1.} The Guardian https://www.theguardian.com/society/2009/aug/08/dentists-earnings-nhs-private-practice. Accessed December 2017. Align Technology Switzerland GmbH, Suurstoffi 22, 6343 Rotkreuz, Switzerland

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DIARY OF EVENTS

APRIL WEBINAR

April 28, 8.00pm

via Zoom

Dr Bob Philpott, endodontist, will conclude his three-part series with a webinar entitled 'April is Retreatment'. Log on to www.dentist.ie to register. Bob will also give a hands-on endo course in Cork in the autumn – date and venue to be announced.

CPD DAY

May 21

Dublin Dental University Hospital

Information: decontaminaationcpdday@dental.tcd.ie

MAY WEBINAR

May 25, 8.00pm

via Zoom

Dr Eoin Mullane, endodontist, Limerick, will give a presentation entitled 'Endodontics - the Dos and Don'ts. Please register at www.dentist.ie.

.....

ISDH ANNUAL CONFERENCE

June 23

Lyrath Estate, Kilkenny

Information: www.isdh.ie

BIOCLEAR HANDS-ON COURSE

September 30

Radisson Blu Stillorgan

Information: www.dentist.ie

HSE SEMINAR

October 13-14

Midlands Park Hotel, Portlaoise

We are delighted to announce that the Annual HSE Dental Surgeons Seminar will recommence in October. Further details and full programme to follow.

IDA COLGATE CARING DENTIST AND DENTAL TEAM **AWARDS 2022**

November 19

InterContinental Hotel, Dublin

We are delighted to announce the Colgate Caring Dentist and Dental Team Awards for 2022. Details will be sent to dental practices on how their patients can nominate them for an award.

Can you contribute to our Journal Editorial Board?

Expressions of interest are sought for membership of the Editorial Board of the Journal of the Irish Dental Association.

As publishers of Ireland's leading peer-reviewed dental journal, we are particularly keen to receive applications from IDA members in general practice. Candidates are asked to submit a cover letter outlining their background, areas

of interest, and an indication of how they can contribute to our team. Shortlisting and interviews may be arranged. Under the stewardship of our newly appointed Editor, Dr Cristiane da Mata, the Editorial Board meets three times a year to agree content for the following editions and discuss Journal development.

If you would like more information on the role and commitment involved, please contact Liz Dodd liz@irishdentalassociation.ie.



In memoriam – Fionnuala O'Brien



The officers and staff of the Irish Dental Association were greatly saddened to hear of the recent passing of Fionnuala O'Brien, a former member of staff at the Association.

Fionnuala is especially associated with her work as Journal Administrator and as Personal Assistant to the Honorary Editor of the Journal, a position in which she served with great dedication and commitment. She finished work with the

Association in 2019 after more than 21 years' distinguished and valued service.

Fionnuala was a highly regarded and popular member of staff who was known to many members over the years as a friendly, courteous and highly professional member of our team.

On behalf of the officers and staff of the Association, we extend our deep and sincere condolences to Fionnuala's family and friends.

Oral health must be political priority

According to a major new study on the absence of political priority for oral health in Ireland, "to avoid repeating historical mistakes, successful reform will require greater political interest than experienced to date, strong political will, and a major focus on implementation, including positive engagement with oral health professionals".

The study, entitled "Toothless' - the absence of political priority for oral health: a case study of Ireland 1994-2021' was written by Dr Una McAuliffe, Prof. Helen Whelton, Prof. Mairead Harding and Dr Sara Burke, and is based on a PhD dissertation by Dr McAuliffe. The authors state that this lack of political priority is not unique to Ireland, with global oral health suffering from limited political attention. Referencing the national oral health policy, Smile agus Slainte, which was published in 2019, the authors state that a key finding from interviews carried out for their research was a "perceived failure to engage with all relevant stakeholders, particularly representatives of the HSE and private dental practitioners as the policy was being developed".

The failure to implement a variety of recommendations, guidelines, and the national oral health policy, is also highlighted: "This research finds that insufficient engagement has taken place with all dental professionals during the development of Smile agus Slainte. International evidence highlights that efforts to transform health systems are more successful when healthcare professionals are engaged, leading to improved clinical outcomes, patient safety, care quality and financial performance".

The authors state that the pandemic highlighted the position of oral health within the broader health system: "The emergence of 'essential oral healthcare' as a consequence of the pandemic must be defined and further harnessed in supporting future health system reform, particularly in the realm of universal health coverage".

The study can be read in full at: bit.ly/3vbssDQ.

PER-IADR conference 2022

The Pan European Region of the International Association for Dental Research (PER-IADR) will hold its 2022 PER-IADR Oral Health Research Congress in Marseille, France, from September 15-17, 2022. This event will present with a unique scientific programme, consisting of state-of-the-art symposia, outstanding keynote lectures, and oral and poster presentations given by researchers from Europe and beyond. This year's meeting of the Irish Division IADR will be held at the Congress, along with the Hatton prize competition.

Abstract submission is open, deadline April 23.

Further information is available from: https://per-iadr2020.com/.



ADVERTORIAL FEATURE



Finance fit for your life

Colm Moore, who has been advising dentists on finances for many years, looks at the financial planning market in 2022 and leaves readers with seven clear 'takeaways'.

Financial advice is a broad term with many definitions and interpretations. Depending on the provider you choose, what you receive can vary greatly along with the outcomes. The need for a definitive process to guarantee the best solutions for consumers was the primary driver behind the introduction of the CERTIFIED FINANCIAL PLANNER™ designation in Ireland back in 2010.

Fewer independent advisers are operating in Ireland over the last 10 years as the marketplace shrinks and consolidates. The pillar banks, Allied Irish and Bank of Ireland are buying up Goodbody and Davy Stock Brokers respectively. The Canadian-owned Irish Life (whose pensions and investments you are sold if you take your advice from the AIB bank channel) are buying medium to large size brokerages to develop their assets under management.

The CERTIFIED FINANCIAL PLANNER™ designation is a standout in the marketplace for those who want all options evaluated for them. With an estimated 350 acting independently in Ireland they are highly qualified professionals who ensure you are getting the best advice available from all the options in a process that's accountable and transparent.

When you decide you want independent advice what does this mean to you and how does this translate to a financial review? In practical terms when reviewing any new client we analyse for the following items.

Life Cover Review

Firstly we look at what you need for protection covering the family, business and loans. There are methods to quantify this and one of the most accurate is to map out the impact of the death of either spouse on future cash flows for a defined period normally to where all children are through college and independent. Once this figure is established we look at any existing policies to see if they fulfil this need. In the majority of cases, we find that clients were over-insured and they ended up saving money by cancelling policies. In other cases, we find clients are overpaying for cover because due to intense competition in the market place insurance companies are reducing premiums to drive business and increase market share. For nearly five years one of the main insurers in Ireland has had a discount of 15% on life cover premiums. However, this discount has to be passed on by the broker which does not happen as much as it should as the commission paid is a function of the premium and discounts impact broker remuneration.

Takeaway #1

If you have taken out life cover in the last five years that was not quantified to fill a specific need or received a discount you should ask your adviser why.

Business Protection

Business protection has a similar methodology in that you quantify the impact of the death of the business owner and insure accordingly. But what you need to understand is that if the company pays the premium in the event of a claim, the policy proceeds are paid into the business and not directly to your family. This type of cover is suitable for shareholder protection where a business has more than one owner and the proceeds are used to buy back shares under agreement. It is not suitable where the intention is for the proceeds to go directly to your family as they will have to extract the funds from the company and pay the same taxes as drawing a salary. This is a very common problem.

Takeaway # 2

If you were told to have your business pay for life cover to be more tax-efficient, are you aware the policy proceeds are going to the company and are subject to normal taxation on extraction?

Living Benefits Review

There should be a clear distinction between life cover (death protection) and living benefits which are income protection and serious illness cover. Without a doubt, income protection is the most important cover you can have. Your ability to earn is one of your most valuable unrecognised assets and a culmination of years of hard work, study and determination on your part and needs to be covered. These policies are designed to pay out if you cannot work in your occupation. With 51% of all claims for this cover relating to psychological and orthopaedic issues in a profession that is high pressure with you on your feet all day, there would need to be a strong case for not having this. Serious illness is different to income protection in that it pays out a lump sum on diagnosis, typically heart attack, cancer and stroke and works well in tandem with income protection if you are going to be out for a long time or unable to work again.

Takeaway #3

Medical advances mean you are more likely to survive a major illness than die, but what will you do if you are unable to return to work and earn a living?



Pension Review

This section has to have a performance and cost review accompanied by full cashflow modelling that shows the future projections of your pension and the drawdown scenarios when you reach retirement age. Your pension is a supremely tax-efficient tool for wealth accumulation and cash extraction from a business. It is one asset in your retirement armoury and needs to be overlayed with your other assets and income streams to give you a model of retirement and how best to draw cash.

Takeaway #4

Make sure your pension is projected out to the end of life, using full cashflow modelling mapping various drawdown scenarios and matches the best in class pensions in the market.

Investments and Savings Review

This should look at how you are investing personally held funds and determining if you are optimising the most tax-efficient environment for them. Most personally held investments in Ireland suffer from a 1% entry levy, 1-2% annual management charge and 41% tax on gains. This is a tough regime under which to make returns. Options do exist for clients to invest under Capital Gains Tax which removes the 1% entry fee, reduces the annual charge and the tax on gains is at 33% after your annual CGT exemption of \in 1,270. This is also the section of the report that ties into inheritance tax planning and it will be quantified if you should be accumulating assets in your children's names to take advantage of the small gift exemption which allows any one person to gift another \in 3,000 per annum with no tax implications. This has no impact on the current lifetime parent/child threshold of \in 335,000.

Takeaway #5

Determine the best way to accumulate personally held assets and identify the appropriate tax-efficient model for holding them.

Inheritance Tax Planning

An often overlooked but key piece of financial planning. This is not on most people's radar but when you realise \in 335,000 per child is the inheritance tax threshold, the problem comes into focus. Only by calculating the combined value of your home, business, pension and investment assets do you realise that everything above \in 670,000 (two children), \in 1,005,000 (three children) etc is going to be taxed at 33% that the problem becomes stark and quantifiable. Many do not realise

this is an issue that can be solved. There are innovative solutions in the marketplace for this including one of the more groundbreaking policies ever launched in Ireland. This policy insures both spouses for the inheritance tax liability. On death, the cover amount is received by the estate tax-free for settlement of the bill thus leaving all the assets in the children's names. The remarkable part of this policy is that after 16 years if you have not used the policy you are guaranteed that 70% of the premiums paid are returned to you. This is not conditional on anything other than you deciding you want to end the policy. This life cover can protect your family from a substantial tax bill in the medium term while giving you time to plan for alternative ways to reduce the liability.

Takeaway #6

A comprehensive review will identify if an inheritance tax liability is an issue for you. Seek out a CERTIFIED FINANCIAL PLANNER $^{\text{TM}}$ for guidance.

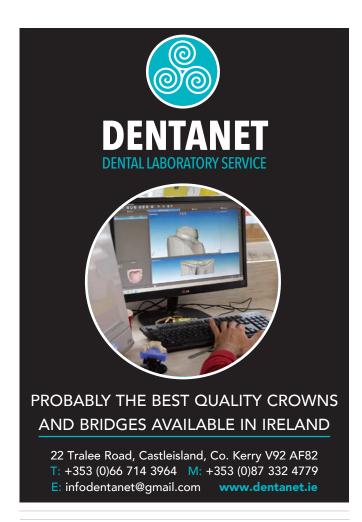
Cashflow Modelling

Utilising cashflow modelling software is the future of financial planning and no review is fully complete without this. This enables a graphical representation of your financial future based on your current set-up projected out to end-of-life, taking into account asset growth, savings contributions and taxation. Any changes that we recommend are fed through the software to show you the long-term impact of the actions you take and to give you the certainty that the action you are taking is in your best interest. Cashflow modelling has changed the rules of the game and you need to be on the same pitch as those benefiting from this service to fully realise your financial goals. Moore Wealth Management will be running full demonstrations of this service at the IDA Conference in Galway this May if you would like to see it in action.

Takeaway #7

If your adviser is not running cash flow modelling for you, they are not providing you with the most in-demand service in financial services today and you need to ask why.

The advice market is changing and this is natural. The larger players and banks are further developing one size fits all strategies and campaigns. You don't have to fit into one of these templates. CERTIFIED FINANCIAL PLANNERS™ are maintaining their independence and delivering world-class solutions to clients.







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Rebuild and reform NI dental service

The British Dental Association Northern Ireland (BDA NI) has urged all candidates contesting the coming Northern Ireland Assembly elections to pledge their commitment to rebuild and reform a dental service that faces a deeply uncertain future as it emerges from the pandemic. With practices facing a massive hike in costs to deliver health service dentistry following Covid-19, dentists are worried about the future of NHS dentistry and the patients who depend on this service. They say that without additional support to address the rising cost of care, in parallel with work on a new contract, health service dentistry will simply not be

The BDA says urgent action on funding is needed. Dental earnings have reduced by 40% in real terms since 2008, with committed health service dentists now earning the least. With morale among the profession at a historic low, half of all dentists are now stating their intention to move towards more private work.

Over two-thirds of health service dental practices reported at least one unfilled dentist vacancy last year.

A total of 40% of practices say reluctance to work in health service dentistry is the key difficulty in recruiting. The BDA NI is calling on all political parties to set out a concrete plan to shore up health service dentistry. It calls for the restoration of a scheme that recognised and rewarded commitment to the NHS. It has also stressed the need for sweeping action to tackle rampant oral health inequalities in Northern Ireland. Roz McMullan, Chair of the BDA's Northern Ireland Council, said: "Short-term financial support saved health service dentistry from collapse during the pandemic, but the next Assembly must deliver real change if we're going to avert a crisis".

Appointment at Braemar Finance

Braemar Finance has appointed Lorraine Blake as Area Sales Manager for the Republic of Ireland to support and drive the funder's range of offerings for new and existing clients in the dental profession and other sectors.

According to Braemar Finance, Lorraine is an accomplished senior business and relationship development executive

with over 20 years' commercial experience in the asset finance sector.

The company states that she has held key senior commercial positions working across a wide range of customer-facing roles, with a number of highprofile organisations supporting Irish businesses. David Angus, Sales Director, Braemar Finance, said: "I'm delighted that Lorraine's joined us, not only to help us build and expand our presence within the professions across Ireland, but also for our existing clients and suppliers, who will benefit from Lorraine's experience and expertise".

Lorraine added: "This is an incredibly exciting time for asset finance and professions clients across the Republic of Ireland who are looking to enhance, grow and expand their business".

Developments at DMI

DMI has announced that it is now the exclusive distributor for Midmark autoclaves in the Republic of Ireland. According to DMI, the Midmark Class B autoclave features a sleek, stylish, Italian design, is developed with leading technology and designed for high performance. According to the company, the Midmark autoclave range is innovative, reliable, easy to use and the perfect solution for busy practices. DMI states that key features include an integrated printer and USB port as standard, optional integrated water purification system (ROSI), and rapid pre-programmed cycles.

SureSmile from DMI

The company has also announced a new partnership with SureSmile Aligners by Dentsply Sirona. SureSmile is an orthodontic planning platform that DMI states suits all levels of experience and is open to all STL files for a digital workflow. It fully integrates with all Dentsply Sirona scanners, as well as other commonly used scanners.







Sterilisation and materials from Coltene





Coltene states that infection control protocols should be seamless. According to the company, its SciCan STATIM B vacuum autoclave will work hard despite its compact size, with sterilised dry-wrapped loads delivered in 27 minutes. According to Coltene, smart features in the autoclave improve automation, such as: an enhanced documentation mode; programmable features to pre-warm the chamber and run test cycles; automatic user software updates for connected equipment; and, maintenance reminders, tutorials and tips.

The company also states the benefits of its Brilliant Componeer system. Coltene calls it a direct composite veneering system for the possibility of highly aesthetic anterior restorations in a single appointment. According to the company, the system comprises prefabricated shells, which use the same submicron filler technology as Coltene's Brilliant EverGlow universal composite. Coltene states that this means you get exceptional polishability, long-lasting gloss retention, and high mechanical strength.

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Re-connecting the tribe

The IDA's Annual Conference is back live and in person in the City of Tribes this May, with the theme of 'Re-connect' one we can all get behind.



Pre-Conference Programme

Things kick-off on Thursday, May 12, with the IDA's Pre-Conference Programme, where the topics for study and discussion include endodontics, aesthetic dentistry, crown lengthening, dental photography, compliance, and composite workflow.

Drs Aisling Donnelly and Greg Creavin will offer a half-day hands-on course running in the morning or afternoon on maximising success in endodontic treatment. Prof. Markus Blatz is offering a full-day lecture on the CAD/CAM ceramic update in aesthetic dentistry. Delegates can also avail of a half-day hands-on workshop from Dr Jim Grisdale in the morning or afternoon, on crown lengthening for predictable aesthetic and functional restorative treatment outcomes.

If you're looking to improve your dental photography skills, Drs Minesh Patel and Ambrish Roshan will present a half-day hands-on course on the topic, also available in the morning or afternoon.

Achieving compliance takes careful attention to detail, and attendees can take in a 90-minute lecture at either 10.00am or 2.00pm on the frequently asked questions around compliance.

Dr Nik Sethi will present a full-day hands-on course on a posterior composite simplified workflow. The focus will be on rethinking cavity design, utilising heated composite, and a step-by-step hybrid injection moulding approach with final increment layering for efficient, stain-free, predictable and aesthetic restorations.



SPEAKER
Prof. Walter Renne, Medical University of
South Carolina

Walter will be giving two presentations at the Conference, one on using 3D printing to develop the practice of your dreams, and another on where we are now with intra-oral scanners. Walter has spent most of

his career in academia, and is Professor and Assistant Dean of Innovation and Digital Dentistry at the Medical University of South Carolina.

Walter started a digital dentistry programme and built a curriculum for undergraduate dental students 15 years ago. His was the first dental school to make same-day milling of restorations a standard of care. Every dental student graduates with at least eight single-visit milled restorations.

Walter is looking forward to the IDA Annual Conference, and says: "I'm really excited to lecture on what's new with 3D printing, intra-oral scanners and milling. We're practising dentistry in an incredible time where technology is causing an unprecedented level of efficiency and control. Dentists are able to do so much more in their office using the latest technology, which ultimately benefits patients. It's my goal to show what's possible and to inspire practitioners to take a second look at all the fabulous technology available".

CONFERENCE DAY 1

On Friday, May 13, the Conference proper begins with two programmes for delegates to choose from running simultaneously in different rooms. Starting things off in the first programme is Prof. Walter Renne, who will speak on how 3D printing can help you to develop the practice of your dreams. In programme two, Dr Jim Grisdale will look at the dark side of implants, covering complications and management.

The IDA's GP Meeting will take place at 12.15pm and an update from Dr Markus Blatz on CAD/CAM ceramics in aesthetic dentistry will run at the same time. Dental Protection Risk Credits will be on offer for those who attend Dr Raj Rattan's talk on 'e-fingerprints – a review of the challenges of ethical practice'. In the final session of the day in programme two, Dr Slaine McGrath will look at social media and how dentists can use it to grow their practice. In programme one, Dr Chris Griffiths will speak about the exhumation of mass graves and why it is important to do so. Chris previously worked in East Timor as part of a team recovering the bodies of the young victims in the Oecussi massacre. This talk will outline some of the experiences learned from uncovering these mass graves.

CONFERENCE DAY 2

On Saturday, Drs Aisling Donnelly and Marielle Blake begin the programmes, with Aisling looking at how to predict, avoid and recover from endodontic mishaps, and Marielle examining the role for Invisalign in orthodontic practice. Throughout the day there will be talks on dental anxiety management from Dr Grace Kelly, restorative options for managing caries in primary molars from Dr Jennifer McCafferty, the re-classification of periodontitis from Dr Rachel Doody, and removing the barriers to successful dental care for autistic patients from Drs Gillian Smith and Jennifer Collins, plus much more.



SPEAKER

Dr Slaine McGrath, Slaine Smiles

Following graduation from Trinity College Dublin in 2012, Slaine moved to London where she worked at Harley Street Dental Clinic with some of the UK's leading cosmetic dentists. In 2018, she started

marketing cosmetic dentistry on Instagram and it transformed her career. Slaine says she went from doing general dentistry for whoever happened to walk into her surgery to having a 12-month waiting list in her own clinic. She now lives in Edinburgh, and splits her working time between the Scottish and Irish capitals. She has already established a clinic in Dublin, with one in Edinburgh opening later this year.

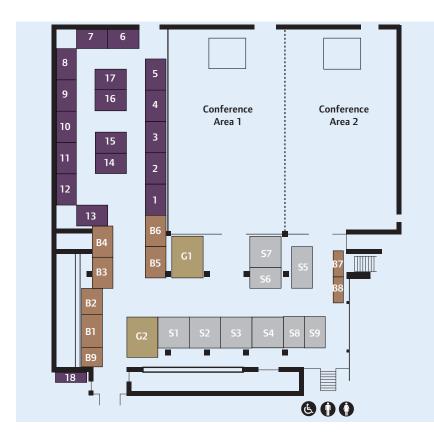
Slaine will speak at the Conference on how to grow your practice with social media and hopes her talk will give practitioners the confidence to start advertising their work on Instagram. She says social media offers dentists more benefits than purely commercial ones: "I think social media has absolutely helped dentistry stay connected during the pandemic and has also built a community of dentists from all over the world, which would otherwise not have been possible. Via social media, I have a huge network of dental colleagues and friends around the world who I speak to regularly and refer patients to".

Dinner is served



The IDA's Annual Dinner takes place on the Friday, with a drinks reception starting at 7.00pm and dinner at 8.30pm. Tickets are €85. For those looking to get into the swing of things before the Conference starts, the President's golf competition will take place at Galway Bay Golf Resort on Thursday, May 12. For anyone booked into a pre-Conference course on that day, the IDA has reserved some tee times in the afternoon of Wednesday, May 11.







SPEAKER Dr Minesh Patel, BUPA **Dental Care** Minesh graduated with honours from

Barts and The London School of

Medicine and Dentistry in 2009. He went on to complete a master's in aesthetic dentistry in 2013 from King's College London and was awarded Best Young Dentist in 2016. Minesh is the creator and teacher of the innovative and highly-popular f:ocus dental photography training brand and product line, which teaches dentists how to implement an excellent standard of photography, and to use it to fuel career development and improve clinical outcomes.

Minesh says he will be bringing the f:ocus philosophy to the IDA Annual Conference via two half-day handson training sessions with live shooting demos, as well as a high-definition visual lecture in the main forum for all attendees to watch. He explains: "After uncertain times in dentistry due to the pandemic, f:ocus is here to help dentists reignite their professional passion and discover the aspects of modern dentistry that can be fun, rewarding and satisfying".

LIST OF EXHIBITORS

GOLD

- Colgate G1
- G2 DMI

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- **S1** BF Mulholland
- S2 Medray
- 53 Coltene
- S4 VOCO
- 55 Listerine
- S6 Dentawealth **S7** Nobel Biocare
- **S8** 3M
- **S9** Planmeca

BRONZE

- McDowell & Service B1
- В2 Optident
- В3 Dentally
- В4 Pamex
- В5 Endoperfection
- B6 Moore Wealth Management
- B7 Linked Financial
- **B8** Happy Threads
- В9 Braemar Finance

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- NSK
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- 9 SME Finance
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- Karma Sales and Services 17

- Doyle Mahon Insurances 18
- **Dental Protection** 19
- 20 Irish Dental Hygienists Association
- 21 Capital Flow
- 3 Mobile 22
- 23 Kulzer
- 24 Ormco
- 25 Irish Oxygen
- ZimmerBiomet 26
- Irish Dental Nurses Association

Other activities

As always, a full trade show will be available to delegates, where conference sponsors will be able to show you their latest wares and guide you on what is best for your practice. The Dr Joe Moloney Award for an outstanding Irish presenter/lecturer at the Conference will be presented on the final day. The award is sponsored by the Dental Health Foundation and delegates will be able to nominate their presenter of choice. On the Friday, the Dr Tony Costello Medal will be awarded to a student or students from one of the dental schools. Students will produce a 10-minute table or poster demonstration on a subject applicable to general dental practice, and a winner will be picked by the judges.

Nursing Programme

Saturday will also see the Nurses' Programme take place. Kelly Doherty and Patrick O'Hare of Safe Hands will kick the day off with a talk on the team approach to medical emergencies. Following this, Dr Eamon Croke will look at the basics of compliance.

In the afternoon, Dr Simon Shane will look at how money can be saved through the efficient maintenance and care of all of your practice equipment.

Closing out the programme will be Dental Protection's Dr Noel Kavanagh, who will show how team involvement can lead to better record keeping.

Is the customer always right?

The era of paternalism in healthcare has long since passed and modern clinical practice is based on patients being presented with options and exercising choice.

We all recognise the need to respect patient autonomy and the freedom individuals have to choose the particular care they receive. But where does this leave the clinician when the patient's choice is at odds with the advice provided? Is the customer always right? Should the clinician go against their own better judgment or recommendations to accommodate the patient's preference? It can be a conundrum when the patient has a set view of what they want and insists that the clinician delivers this.

Increasingly, members of the public have an awareness of their individual 'rights'. This can lead to a feeling of entitlement, which then translates into unrealistic expectations and demands. In the dental arena this can manifest as a patient insisting on a particular form of treatment on the basis that it is their mouth and their teeth so they are entitled to tell the dentist what they want done. Clinicians spend their careers caring for patients. It is in their nature to address problems and help patients in whatever way they can. Paradoxically, this commitment to helping others can create problems if it is not securely bound to the ability to step back and take an objective view of the issue to be addressed.

There is a difference between what is in the patient's interests in terms of treatment and what treatment the patient may be interested in having. There are many instances of dentists ending up in difficulties and being on the receiving end of complaints simply as a result of well-intentioned, but perhaps ill-considered, efforts to accommodate a patient's wishes, which may actually be counter to their best interests.

Shared decision-making is key

In an age of increasing patient awareness of what is out there, and ever-increasing expectations of what can be done, there is sometimes an element of confusion between a patient consenting to a particular treatment and a patient demanding a particular treatment. While it is true that the patient has the right to give or withhold consent for a particular treatment, this is about granting permission. It is about giving the green light to go ahead in a particular direction. It does not mean that the dentist is compelled to provide the treatment in question, merely that they are permitted to.

It is no more appropriate for a patient to demand a certain treatment than it is for the dentist to impose this. The key factor is shared decision-making, not capitulation to a demand from one side or the other. There needs to be agreement about treatment that both are happy with.

For example, a patient requires an extraction but due to a fear of needles is

Dr Martin Foster
BDS MPH DipHSM

Martin is Dentolegal Consultant at Dental Protection

adamant that they will only have treatment as long as no injections are involved. The patient may be insistent that it is their choice, but it is up to the dentist to decide whether they consider that it would be safe and appropriate care to proceed without local anaesthesia. The tooth may be grossly mobile or firmly embedded, and the dentist is the one who is best placed to understand the implications of the clinical presentation. If it is inadvisable to proceed, the dentist should not go against this sound clinical judgement.

Other scenarios include the patient who does not wish to have dentures and insists that the dentist restores periodontally involved teeth with crown and bridgework, which the dentist feels is ill advised and doomed to fail, but which they agree to provide in order to accommodate the patient's wishes. It may be well intended, but the dentist can expect little thanks when the inevitable happens. Similarly, a dentist who 'has a go' at trying to preserve a hopelessly compromised and unrestorable tooth in response to a patient's plea to save this, can often find that the patient



holds them responsible when the tooth is lost. Far from receiving gratitude for their efforts, the clinician can find that they are blamed for not having delivered the outcome that the patient wanted and which the patient claims was 'promised'.

Balancing wishes and responsibilities

The important fact to bear in mind is that although a patient may have personal wishes, which the clinician obviously needs to take account of and respect, the clinician also has professional responsibilities, which dictate how care should be provided. These include doing no harm and acting to protect the patient's interests. Providing care that runs counter to the dentist's own judgement is not responsible treatment. Yes, the patient wants you to and yes, you could proceed, but should you? It is one thing to say that as long as the patient consents then the risk of failure should be 'on them', but this may not stand up dento-legally. It is not unusual for there to be an outbreak of selective patient amnesia or understanding when the outcome is not good. For patients to claim that they were not warned or were advised appropriately is not uncommon.

It also happens that a disappointed patient will say that if the chances of success were so slim, then why did the dentist do the treatment in the first place? There are all too many cases where dentists say that they knew that the treatment was unlikely to be successful but they proceeded with it because they wanted to do something to help the patient. Unfortunately, the limited prospect of success is

often not made sufficiently clear, and the dentist ends up being blamed for an outcome that would have been inevitable in any case.

The best policy

The best way to help is just to be honest. Correcting an unrealistic expectation rather than catering to it is not always easy in the moment, but often saves more grief for the patient and the dentist in the long run. The dentist has not just the skill, but knowledge, and both have to be used to best serve patients. Explaining why something is a bad idea and clarifying the basis for declining to provide a particular treatment is the best way to help a patient. Conversely, building up a patient's expectations (even inadvertently) only to then dash them is not the best way to treat patients or instil confidence in your approach to care.

It is wise to stop and consider if a patient seems intent on following a treatment path about which you have reservations, and down which you would not recommend travelling.

Patient autonomy must be respected, of course, as you cannot proceed without the appropriate permission, but this is not the same as handing over responsibility to the patient and passively accepting direction. If there are inner alarm bells sounding it is well worth putting on the brakes and pulling over. The treatment journey requires both dentist and patient to agree on the destination and how you are going to get there.



Efficient and effective use of the electronic apex locator

"The principal aim of root canal preparation is to obtain and maintain access to the apical anatomy, for the purpose of delivering antimicrobial agents to the infection in this site'.1

Preparation of the root canal space to an adequate apical diameter to facilitate delivery of irrigant, while ensuring that the preparation, irrigation and obturation material remain within the root canal space and as close to the apical foramen as possible, presents a significant technical challenge.

Preparing the canal

Where should we prepare the canal to? There are multiple ways in which the working length can be determined: tactile sensation; paper points; radiographs; and, the electronic apex locator (EAL). Radiographs are essential for root canal treatment, but the EAL is currently the most accurate method available for determining working length.

The apical extent of preparation should ideally terminate within the canal and at the apical constriction. Preparing the canal to/beyond the apical foramen risks obliterating the apical constriction, extruding dentine debris and/or obturation material into the periapical region that may ultimately negatively impact upon the treatment outcome. There is a consensus that the apical constriction lies 0.5-1mm from the apical foramen.

This article highlights some clinical tips to maximise effectiveness and efficiency when using the EAL to determine working length. These tips are based on the use of the Root ZX II EAL (J Morita MFG Corp), a widely used and reliable canal measurement module.

Clinical tips

1. Carry out pre-operative checks to ensure that the EAL is functioning correctly

- Ensure that the batteries are full to yield the most accurate results.
- Inspect the probe cord (Figure 1) for cracks and exposed inner cabling.
- Ensure that the probe cord is fully inserted into the canal measurement module and is not loose.
- Connect the contrary electrode (lip ring) and file holder together, and if the LCD display shows a stable illumination of the red bars adjacent to 'APEX', then your EAL is working correctly (Figure 2). If the display



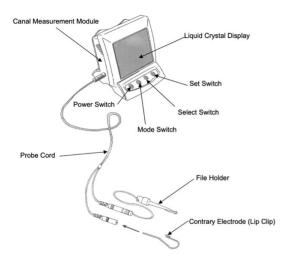


FIGURE 1: Components of the Root ZX II EAL (picture from instruction manual; J Morita MFG Corp).

flashes/jumps between blue/red bars, there is a problem with one of your connections and they should be sequentially replaced until the faulty component is identified.

2. Insulate files from metallic restorations

- If the file touches against metallic restorations, the circuit is shorted and an accurate determination of the apical foramen/apical constriction using the EAL is not possible. Strategies to avoid this include removing amalgam restorations prior to initiating root canal treatment. This will also help to determine if the tooth is predictably restorable, plan the definitive restoration, and ensure that there is no inter-appointment bacterial ingress under failing restorations.2
- If access is prepared through an amalgam restoration or metal crown:
- place polytetrafluoroethylene (PTFE) tape on the file so that when the file rests against the metal it is insulated and does not short; and/or,
- place a rim of glass ionomer cement (GIC) around the access cavity margins so that metal is not exposed at the coronal reference points.

3. Carefully select a reference point

- Select a reference point that doesn't involve moving the file under stress, as this can affect the accuracy/reproducibility of the working length.
- On occasion, minor modification of the tooth is indicated to achieve a stable and reproducible reference point, like flattening the cusp tip(s) using a diamond bur.









FIGURE 2: FIGURE 3a

FIGURE 3c

FIGURE 2: Red bars adjacent to 'APEX' illuminated and stable on connecting the file holder and lip clip. FIGURE 3a: EAL showing the 'zero reading', identifying the apical foramen. FIGURE 3b: EAL showing that patency has been achieved. FIGURE 3c: EAL showing the '0.5 reading', indicating the position of the apical constriction.

4. Determine important anatomical landmarks using the EAL

- Perform coronal flare of the canal prior to obtaining the zero reading.
- Using a small file generally a size 08 or 10 advance the file towards your estimated working length (a larger file – 15 or 20 – may be required for large/wide canals).
- As you approach that length, attach the file holder to the endodontic file within the canal and advance slowly with a watch-winding motion until the file reaches the bottom green bar on the EAL (Figure 3a). This is the zero reading and represents the file being at the apical foramen.
- Advance the file slightly to the first red bar with small files only (Figure **3b).** This length represents the length to which your patency file should
- Rotate the file counter-clockwise until it gives a stable reading at the '0.5 reading' (middle of the green bars) (Figure 3c). In most cases, this reading can be reliably used to determine the position of the apical constriction.
- If the reading is not stable, consider using a larger file size.
- Excessive irrigant in the canal/pulp chamber, excessive inflammatory exudate entering the canal via the apical foramen, root fractures, immature/open apical foramina, perforations and resorptive defects may affect the accuracy of the EAL readings.

5. Determine the working length

- In most instances, subtracting 0.5-1mm from the zero reading to determine working length yields a satisfactory point to terminate the canal preparation.
- Work to the EAL '0.5 reading': attach the file holder to each file to ensure that it terminates exactly at the '0.5 reading' length and confirm/adapt the working length as required. As the canal geometry changes with increased dentine removal during chemo-mechanical preparation, the working length may also change, and this method ensures that the clinician prepares to the same anatomical point each time.
- When using rotary instrumentation, the rotary file may be removed from the handpiece and used like a hand file to confirm the '0.5 reading'. It may also be used as a hand file to refine the apical preparation as required (Figure 4).
- Patency should be confirmed between each file by placing a small file to the 'zero reading' +0.5mm and attaching to the EAL to ensure that it enters the red bars adjacent to 'APEX' on the LCD.



FIGURE 4: EAL attached to rotary file during preparation to confirm that preparation is at the 0.5 reading

6. Dealing with long canals

With the rubber bung fully seated against the handle of the file, a working length greater than 23.5mm is difficult to manage with standard 25mm files. If longer files, e.g., 31mm, are not available, trim 2-3mm from the handle of the 25mm files using a high-speed handpiece. This provides additional file length to aid length determination.

When used correctly, the EAL may expedite treatment, reduce the need for intra-operative radiographs and result in a biologically orientated chemomechanical preparation length that maximises the likelihood of a successful outcome.

Reference

- 1. Gulabivala, K., Patel, B., Evans, G., Ng, Y.-L. Effects of mechanical and chemical procedures on root canal surfaces. Endodontic Topics 2005; 10: 103-122.
- 2. Quilligan, G., McKenna, G., Allen, F. The restorability assessment and endodontic access cavity interface. Dent Update 2016; 43: 933-938.



Getting to grips with social media

The IDA wants dentists to use social media to make their voices heard on the important issues in dentistry and oral health.

Growing importance of social media

Since Facebook exploded onto the scene in the early noughties, social media has grown and developed exponentially, fundamentally changing how we communicate with each other – for better or worse. From what was once seen as a peer-to-peer platform, with users posting images and trivial content relating to their own lives, social media has now become an all-encompassing universe for

We are therefore asking all dentists to engage with social media to increase our reach and bring the message home to the public that the HSE and the Government are failing them when it comes to, not least, public dentistry.

We urge you all to like, share, retweet and create your own content to post online and drive the conversation on behalf of your profession to make the Government take notice of the clinical expertise needed to create oral health policy in Ireland.



Social media in action

Below is an example of how the IDA has leveraged social media to create organic media opportunities across traditional media:

Tweet

■ HSE continue to provide inaccurate info to Gov on DTSS. 10 of 24 dentists have left DTSS scheme since 2021 in Galway, 42% decrease. Urgent reform needed now! #PullingTeeth @Farrell_Mairead @MaryButlerTD @DonnellyStephen @CTribune @Galwaybayfmnews @TuamHerald @GalwayDaily

Media

- Galway Bay FM: Only 10 dentists across Galway accepting new medical card patients – Link to radio clip
- Connacht Tribune: Only 10 dentists across Galway accepting new medical card patients – Link to article





Back to business and new challenges

The IDA's first in-person Practice Management Seminar took place on March 26 and the bustling crowd was eager to get into the thick of discussion on the issues affecting the profession.



MEMBERS' NEWS

associate, they pay the principal, who then pays the associate for dental services, which are VAT exempt. However, delegates were warned that Revenue may challenge this model and claim that associates are essentially employees under it.

Dental Council update

Chairperson of the Dental Council Dr Gerry Cleary gave an update on the Council's work. The Council is currently updating many of its guides and codes of practice. Its new Code of Practice on Professional Behaviour and Ethical Conduct is out now.

Gerry explained that the Dental Council's position is that a new Dental Act is urgently needed; however, at the very least current dental legislation needs to be updated to introduce mandatory CPD.

When it comes to registration of dentists, Gerry said the Council is doing the best it can to improve turnaround times. He said the vital thing for the Council is to maintain the integrity of the Register. He explained that the average turnaround time for completed applications is four to five weeks; however, he said that only 50% of the applications that the Council receives are complete.

Panel discussion

Former RTÉ journalist Ingrid Miley then moderated a panel discussion between four dentists entitled 'Dentistry 2022: New challenges, new priorities, new ways of working'. The four panellists were: Dr Jennifer Collins of Dental Care Ireland Dr Keith Redmond of Redmond Dental Care in Dublin; Dr Will Rymer of Expressions Dental & Cosmetic Clinic in Co. Tipperary; and, Dr Ambrish Roshar



Pictured at the IDA Practice Management Seminar were (from left): Roisín Farrelly, Manager of Communications and Advisory Service, IDA; former RTÉ Industry and Employment Correspondent Ingrid Miley; and, IDA CEO Fintan Hourihan.

being spiral. When we focus on what's working well, we can initiate an upward spiral.

Dental Protection

Dr Nuala Carney of Dental Protection gave a talk entitled 'Complications in Clinical Practice – recognising, dealing with and preventing them'. Nuala said it is important to understand that complications will occur, and to develop skills to recognise risky situations, handle them, and prevent incidents.

Dentists are dealing with high expectations and difficult levels of anxiety. It's important to remember that patients almost never sue doctors that they like. Nuala said that 70% of litigation against physicians is related to poor







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Oral care principles for older adults: Part 1

Learning outcomes:

- understand the importance of systematic risk assessment when planning care for older adults;
- be familiar with the limitations of old teeth when designing fixed and removable prostheses; and,
- recognise the importance of individually tailored maintenance programmes.



FIGURE 1: Oral presentations of older adults.

Introduction

As the population ages, increasing numbers of older adults are keeping natural teeth well into old age. Over the course of a lifetime, teeth, periodontal tissues and oral mucosa are exposed to a wide range of risk factors for disease. Compared with young adults, older adults (>65 years of age) tend to have a higher prevalence of:

- decayed, missing and filled teeth;
- root caries;
- chronic, severe periodontitis;
- mucosal disease (e.g., chronic candidiasis, oral cancer);
- pathological and/or advanced physiological tooth wear;
- cracked teeth and associated pulpal symptoms;
- ill-fitting complete and partial removable dentures; and,
- hyposalivation (including medication-related reduced saliva flow).

As with any part of the life cycle, the severity and extent of oral disease is strongly related to patterns of sugar intake, oral hygiene practices, smoking habits and attitudes to dental health (e.g., frequency of dental attendance).



The extent and severity of oral disease is not a product of age per se. However, age-related risk factors for oral disease, including levels of dependence and socio-economic status, are associated with higher levels of dental disease and are predictive of future disease.

There is a wide range of oral disease presentation in older adults, and disease profile is strongly influenced by patient attitudes and behaviours, past dental experience, and medical and social factors (Figure 1). These factors must be identified as part of the risk stratification of the patient, which in turn should determine the care strategy.

In this paper, management principles of restorative dental care for healthy and independent older adults will be considered. Principles of management of frail, medically compromised, and semi-dependant older adults will be presented in part 2 of this series.

Principles of context-appropriate care

The care plan for older adults should be context appropriate, and planned in terms of the wider consideration of medical and social circumstances (Figure 2). Where an older adult is clearly well motivated, living independently and healthy, then the full range of treatment possibilities, including complex treatment, can be considered (Figure 2: basic or comprehensive treatment). This includes surgical procedures such as placing dental implants. Replacement of missing teeth with either fixed or removable prostheses may be indicated, but there will be a biological price and higher burden of maintenance. There may be a substantial functional improvement with this course of treatment, and so long as the patient understands the maintenance requirements, then this would be appropriate.

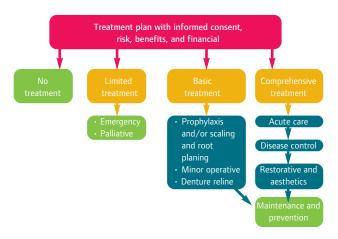


FIGURE 2: Decision-making tree for older adults taking into account patient attitudes, and medical and social circumstances.

Main planning issues

In many older adults, the dentition will be characterised by moderate to high levels of tooth loss, and high numbers of filled or decayed teeth. Root decay is much more common in older adults, and associated with exposed root surfaces, wearing a removable partial denture, and poor oral hygiene. Periodontal attachment loss may also lead to mobility and drifting of teeth. Tooth wear may be evident, and the occlusion may be unstable, complicated by missing occlusal units and worn occlusal surfaces with deflective occlusal contacts. When planning restorative dental care to replace missing teeth, key questions to answer include:

- what does the patient want and what are they willing to accept?;
- are risk factors for disease under control?;
- are damaged teeth restorable?;
- is the occlusion stable?;
- how many teeth are required to stabilise the occlusion?;
- what are the limitations of 'old' teeth as abutments for fixed and removable prostheses?;
- are they capable of maintaining a high standard of oral hygiene/plaque control?;
- is this an age- and circumstance-appropriate intervention?; and,
- what is the plan for future failure?

It is vital to plan treatment that is acceptable to the patient. Replacement of missing teeth can be achieved using either removable or fixed (tooth- or implant-retained) prostheses. Acceptance of removable dentures is reducing among older adults, and there is a high level of non-compliance with denture wearing.^{2,3} Demand for implant-retained prostheses is growing, and it is important to ensure that patients' expectations will be met if that course of action is taken. It is also important to check if the patient has any medical issues that may complicate or contraindicate surgical procedures. This includes a history of taking anticoagulants (risk of bleeding), bisphosphonates or antiangiogenic medications (risk of osteonecrosis). The patient's desire to 'avoid' wearing a denture should not result in attempting to provide a fixed prosthesis retained on teeth that are not suitable or when the occlusion is not stable (Figures 3a and 3b). The likelihood of failure is high, especially when abutment teeth have been endodontically treated. When failure occurs, it is likely to be catastrophic and result in loss of abutment teeth. It is also unwise to provide restorative dental care when risk factors for disease are not controlled.





FIGURES 3a (above) and 3b (left): Nine-unit porcelain fused to metal fixed-fixed bridge retained on endodontically treated #15, 13, 23, and 24, which is mobile; fractured abutments #23 and 24. Patient did not want to have a removable prosthesis. Failure has occurred after less than 24 months of clinical service.



FIGURE 4a: 63-year-old female patient with reduced dentition in the lower jaw; #24 lost and four-unit conventional fixed bridge retained on #13 and 16, placed approximately one year previously. This had fractured due to occlusal trauma and deflective contacts were noted, with pain on these abutment teeth.



FIGURE 4b: Occlusion was stabilised and pain relieved with a new fixed bridge to replace missing #24, replacement bridge #16-13, and a removable partial denture to replace missing #35, 36, 37, 44, 45, 46, and 47.

How many teeth?

For older adults, the desired outcome of care is a natural, healthy, functional dentition for life. This may be achieved with a reduced dentition if a sufficient number of stable occlusal contacts remain, which is the essence of the shortened dental arch concept. When teeth are lost, for some patients, this may result in functional and/or aesthetic impact, which bothers the patient. In the longer term, drifting of adjacent and opposing teeth may also destabilise occlusal contacts and lead to unfavourable forces on the remaining dentition (Figures 4a and 4b). In such cases, the patient is likely to request or need replacement of missing teeth.











Very extensive care with complex needs, including rehabilitation of the dentition with fixed prosthodontics and the ability to accept this care.

Extensive care, which may be solved by a combination of fixed and removable prosthodontics and the ability to withstand the care.

Intermediate care, which requires some alternatives to traditional therapies.

Limited care – these patients cannot tolerate extensive treatment time; need short appointments and a simplified treatment plan.

disclosing agent (Figure 7).

Very limited care - these patients should be treated for pain relief and infection control only.

FIGURE 5: Restorative care spectrum ranging from implant-retained restorations to replace multiple missing teeth, to transition to the edentate state.

 $\textbf{Figure 5} \ \ \text{shows some of the considerations along the restorative care} \\$ spectrum, including full-mouth rehabilitation, application of the shortened dental arch concept, and a terminal dentition where transition to edentulism is the best option.

Older adults - limitations of 'old' teeth

At the tooth level, older teeth tend to be more brittle as a result of dehydration, loss of dental tissue to caries, and repeated replacement of dental restorations. For this reason, many teeth in older adults become unrestorable and require extraction (Figure 6). Clinical judgement must also be exercised when considering the use of heavily restored teeth as abutments for a removable or fixed partial denture. This is particularly relevant when the proposed abutment tooth has been endodontically treated or has lost more than 25% of its periodontal support. Furthermore, with a combination of uneven occlusal loading and expansion of old amalgam restorations, teeth may crack and cause painful

over time, with preferential wear on a reduced dentition. Tooth wear can result in compromised chewing function and appearance, and increased sensitivity. Loss of occlusal anatomy may also compromise guidance of excursive movements, manifested with repeated fracture of teeth and dental restorations.

symptoms. These can be difficult to diagnose and locate, but can be

identified by biting on water-soaked cotton rolls and use of plaque-

Tooth wear is common in older adults, both pathological and advanced physiological. Pathological tooth wear can be due to attrition (caused by

parafunction/bruxism), acid erosion (caused by diet or gastro-oesphogeal

reflux), or abrasion. In older adults, tooth wear is often multifactorial in

aetiology and the diagnosis is established through the clinical presentation and

history. Advanced physiological tooth wear is related to loss of occlusal units

Case 1 illustrates some of the management principles highlighted in this article where care is strongly influenced by both patient- and tooth-related factors.



FIGURE 6: 67-year-old female patient who is ASA3 and has severe saliva hypofunction. #43, 43 extensive caries, unrestorable.



FIGURE 7: Patient had symptoms of "cracked tooth", located to #36 by biting onto a water-soaked cotton wool roll. Identification of extent of the crack confirmed using plaque-disclosing dye following removal of existing amalgam restoration.







Figures 8a, 8b and 8c: Pre-treatment dental status. Note the extensive tooth wear and short clinical crowns on #12, 21, and 22, and fractured #11.

CASE 1

Case details

- A 73-year-old male, irregular attender, had recently fractured #11 and was dissatisfied with the appearance of the resultant "qap".
- He reported that his chewing function had deteriorated over the past few years, and he would like to chew better. He had a large number of missing teeth and had never worn a denture before.
- Aside from taking Lipitor, he had no relevant medical history. He wanted to know if he should extract his remaining upper teeth and have a full replacement denture.

Key clinical examination findings

- He had a good standard of oral hygiene, with very low bleeding on probing and no periodontal pocketing greater than 3mm.
- He was missing #14, 15, 24, 26, 36, 37, 45, 46, and 47.
- Teeth #11 and 13 were extensively fractured and deemed unrestorable. Teeth #23 and 41 had extensive carious lesions, and secondary caries was noted in #17.
- There was evidence of tooth wear on the anterior dentition, which was consistent with anterior attrition. His occlusion was not stable, and he did not have a consistent pattern of guidance due to multiple missing occluding units and extensive anterior tooth wear. Figures 8a, 8b and 8c show his pre-treatment dental status.

Treatment planning considerations

- Patient is not highly motivated to have complex dental treatment. He has not had any dentures before. Will he adapt? How many teeth does he need to create a stable occlusion?
- How restorable are the worn anterior teeth? He is not interested in complex treatment. Maxillary anterior teeth have short clinical crown height, so what are the alternatives to full coverage crowns?
- He is not interested in having a lower denture to replace posterior missing teeth. It is possible to restore to a shortened dental arch, with restoration of worn tooth surfaces and provision of an upper removable partial denture.
- He has a good standard of oral hygiene, and is well motivated to clean his teeth, so he should be able to maintain a denture to replace missing teeth.

Agreed treatment plan

■ Extract #11, #13, and #23, which are deemed unrestorable, and restore carious lesions in #17 and #41.

- After suitable healing period, provide cobalt chromium-based removable partial denture with occluding vertical dimension increased by 3mm.
- Restore worn anterior tooth surfaces with directly placed composite resin buildups at the raised occluding vertical dimension; multiple contacts achieved with restoration to a lower shortened dental arch.
- Reinforce oral hygiene instruction (OHI), including denture hygiene advice. Agree six-month review visits.

Outcome

The patient adapted well to having an upper removable partial denture, and feels that his appearance and chewing ability have significantly improved. His occlusal contacts appear to be stable and reproducible at one year post treatment (Figure 9), and he has not fractured any of the direct composite resin restorations. He continues to maintain a high standard of oral hygiene and commitment to review visits.



FIGURE 9: Post-treatment anterior view.

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Management of fluorosis using resin infiltration

Abstract

Dental fluorosis is a form of hypomineralisation, which is caused by ingestion of excess amounts of fluoride during enamel formation. Fluorosis can manifest as faint, white horizontal lines running across the surfaces of the teeth, diffuse white opacities, brown staining, or pitting. Resin infiltration (Icon; DMG, Germany) can be used to treat mild to moderate forms of fluorosis yielding a more homogenous colour of the tooth. This case report is about a 37-yearold patient presenting with moderate fluorosis, which was treated with tooth whitening and resin infiltration to achieve aesthetic results.

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Introduction

Fluoride intake is well known for its role in the prevention and control of dental caries.1 However, chronic exposure to high concentrations can have adverse effects, such as dental fluorosis. Dental fluorosis is described as hypomineralisation of enamel caused by repeated ingestion of excessive concentrations of fluoride during the pre-eruptive development of teeth.² Susceptibility to fluorosis begins at birth when the first permanent molar starts to calcify, and ends around eight years of age when enamel maturation of the permanent dentition (excluding third molars) is complete.³

Common sources of ingested fluoride include fluoridated drinking water, toothpaste, mouthwashes, fluoride supplements, and infant formula.⁴ The level of fluoride in Irish drinking water is between 0.6 and 0.8 parts per million (ppm), which is less than half the maximum permitted by the EU. This level of fluoride is deemed optimal for protecting the oral health of all age groups. 5 The recommended level for daily fluoride intake is 0.05-0.07mg F/kg/day, which has proved to be very helpful in preventing caries by promoting remineralisation.⁶ However, a daily intake of fluoride that significantly exceeds this safe level increases the risk of dental fluorosis. It is important to note that the adverse effects of fluoride on enamel formation are cumulative, rather than requiring a specific threshold dose.⁷

The severity of dental fluorosis is directly related to the duration and amount of exposure to fluoride. 6 Weight, age, degree of physical activity and nutritional factors also each play a role.⁶ In its mildest form, enamel fluorosis manifests as faint, white horizontal lines running across the surfaces of the teeth, or diffuse

white opacities.⁸ In more advanced cases, mottling of the teeth can be seen, with white lines or streaks coalescing into larger opaque areas. 9 In severely fluorosed teeth, hypomineralisation extends towards the amelodentinal junction, and the enamel may be subject to brown staining or pitting, as well as post-eruptive breakdown in the most severe form.9

Numerous treatment options are available for fluorosis, including:

- (a) tooth whitening, which comprises bleaching the teeth with carbamide peroxide to possibly minimise the contrast between the fluorotic whitish onacities and sound enamel:
- (b) enamel micro-abrasion, in which a combination of a low-concentration acid and an abrasive compound (pumice) is used to erode the surface and subsurface of the affected enamel, exposing the underlying sound enamel;
- (c) porcelain veneers; and,
- (d) resin infiltration, which involves very minimal wear of the surface enamel, exposing the porous subsurface, which is subsequently infiltrated by a lowviscosity resin that has a refractive index similar to sound enamel.¹⁰

Bleaching alone is usually insufficient to provide a complete visual merging of the fluorotic enamel to the sound enamel. Although micro-abrasion and veneers are effective, they necessitate a more invasive approach that involves removing the entire damaged enamel. Resin infiltration appears to be a suitable alternative that provides satisfactory results while being minimally invasive.

The aim of this case report is to describe in detail the resin infiltration protocol involved in the aesthetic treatment of a moderate case of fluorosis.





FIGURE 1: Intra-oral photograph showing pre-operative white and brown discolouration of the dentition.



FIGURE 3: Postoperative photograph showing significant masking of the fluorotic lesions after resin infiltration using Icon.

Case report

A 37-year-old patient presented complaining about the white spots on his teeth. A history revealed no childhood dental trauma or previous orthodontic treatment; however, excessive ingestion of fluoride was discovered when the patient admitted to swallowing toothpaste as a child. The patient reported no hypersensitivity. On visual and tactile examination, white horizontal lines with a striated appearance and white opacities were noted on all teeth present, with localised brown staining on the maxillary incisors (Figure 1). The history and examination confirmed a diagnosis of moderate fluorosis.

A conservative approach was proposed to the patient to manage this case of fluorosis, which was comprised initially of tooth whitening followed by resin infiltration using Icon, and the patient provided informed consent for this treatment plan. 16% carbamide peroxide was prescribed to the patient for athome bleaching, and this was carried out for four weeks (six to eight hours per night) in order to brighten the overall appearance of the teeth and reduce the opaqueness of the fluorotic discolourations. After whitening was completed, 10 days were allowed to pass before carrying out resin infiltration. This allows the free radicals from the bleaching agent to be washed away so that they do not interfere with polymerisation of the resin.¹¹ The steps for resin infiltration using Icon are outlined as follows:



FIGURE 2: Intra-oral photograph of the IsoPrep retractor in the patient's mouth. This photograph was taken after the patient had carried out tooth whitening for four weeks and, as a result, the brown stains and white horizontal lines have diminished.

1. Isolation

A well-isolated working field is essential, as the initial phase involves etching the teeth and the use of resin. This can be achieved using rubber dam isolation or an Optragate retractor (Optragate lip and cheek retractor; Ivoclar Vivadent, UK). In this case, the IsoPrep retractor (from the Philips Zoom in-surgery whitening kit) was used, which provided sufficient lip, cheek and tongue retraction (Figure 2).

Cleaning

All tooth surfaces were cleaned with pumice prior to etching.

3. Etching

Icon-Etch (15% hydrochloric acid) was applied to the tooth surfaces for two minutes and then rinsed away completely with water. This step aims to remove the well-mineralised enamel surface layer and create access to the subsurface hypomineralised fluorotic enamel.

4. Drying

Icon-Dry (ethanol) was applied to the tooth surfaces for 30 seconds. This step gives the operator a preview of the masking effect after Icon-Infiltrant is applied. This assessment was performed together with the patient and, in this case, steps 3 and 4 were repeated five times to prepare the enamel surfaces sufficiently to achieve the desired aesthetic result.

5. Resin infiltration

Teeth were dried before massaging Icon-Infiltrant (low-viscosity resin) onto the tooth surfaces for three minutes to allow sufficient penetration of resin. Excess resin was removed using cotton wool and dental floss.

6. Curina

The infiltrant was light-cured for 40 seconds.

7. Second resin infiltration

Icon-Infiltrant was massaged onto the tooth surface for a second time for one minute to compensate for polymerisation shrinkage, followed by further light curing.

8. Polishina

Polishing disks (Sof-Lex; 3M, USA) were used to polish the infiltrated enamel areas (Figure 3).

Discussion

Fluorotic lesions present with a high degree of subsurface porosity, and these microporosities are filled with either a watery medium or air. 10 Both of these entities have a refractive index (RI) significantly different to that of sound enamel. Due to the difference in RIs between the enamel crystals and the material inside the porosities, light scattering occurs and the fluorotic lesions appear opaque. 10 However, the refractive index of the resin infiltrant is similar to that of sound enamel, so when the infiltrant penetrates the microporosities, the lesions appear similar to the surrounding sound enamel, as the difference in RIs between the sound enamel crystals and the resin infiltrant is negligible. 10 Fluorotic spots can be upsetting for patients as they often compromise dental appearance. The clinical objective of treating this type of tooth discolouration should be achieving an acceptable aesthetic result in the least invasive manner possible. As no mechanical removal of enamel is required, Icon is a minimally invasive approach for effectively masking fluorotic lesions. Furthermore, the treatment time is shorter than micro-abrasion or conventional restorative treatment options, which can serve as an advantage when dealing with paediatric patients. In contrast to bleaching therapy, which can reduce the microhardness of demineralised enamel surfaces, 12 the resin infiltrant is considered to mechanically strengthen the enamel structure.¹³ However, as is the case with tooth whitening and enamel micro-abrasion, the treatment outcome of resin infiltration also depends on the severity of the fluorotic areas. In some situations, only an improvement, rather than a total masking of the fluorotic lesion, can be obtained.¹⁰

In this case, the masking effect of resin infiltration was deemed highly satisfactory by the patient despite the fact that a few fluorotic areas simply became less noticeable instead of being completely erased. The success of this treatment can be attributed to tooth whitening prior to resin infiltration and repeating the Icon-Etch step five times until an acceptable preview of the final result was obtained during the Icon-Dry step.

Conclusion

This case demonstrates that a moderate case of fluorosis can be effectively masked with a minimally invasive technique such as Icon resin infiltration, without the need for abrasion and mechanical tooth preparation. Although aesthetic results were obtained, the long-term effectiveness of resin infiltration has yet to be evaluated.

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the following questions:	0	B: 0.20-0.25mg F/kg/day C: 0.10-0.15mg F/kg/day	0	B: Dentine C: Cementum	0	B: Completely identical C: Negligible

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Unmasking the impact of face masks on communication between healthcare professionals and patients during the Covid-19 pandemic

Précis

The increase in personal protective equipment (PPE) requirements has both physical and psychological impacts on patients and healthcare professionals. Healthcare professionals should use virtual and visual aids to overcome barriers to effective communication.

Abstract

Introduction: The foundations of patient interactions are heavily dependent on facial expression, tone and inflection, which help to communicate treatment plans, obtain consent and break bad news. The expansion in use of face masks during the Covid-19 pandemic may adversely affect the quality of patient-clinician interaction and service provision.

Objectives: To assess the impact of face masks on the experience of dental staff and patients at Guy's and St Thomas' NHS Foundation Trust.

Methods: A survey was developed using a combination of validated psychometric and demographic questions. The survey was administered to 166 dental staff and 57 patients. Data were electronically analysed. Qualitative data were thematically analysed.

Results: Themes identified included: clinical; physical effects; psychological; pre-existing communication difficulties; communication barriers; and, accessibility of dental services. Some 63% (36/57) of patients noted that personal protective equipment (PPE) affected their communication and interaction. Over 70% (119/164) of dental staff reported repetition during consultations.

Conclusion: This study highlights the positive and adverse physical and psychological impacts of face masks on healthcare professionals and patients. Alternative solutions to mitigate the negative impact of face masks on communication include the use of virtual and visual aids. Furthermore, the implementation of well-being and support resources can aid in the challenges presented to healthcare teams.

Key words: SARS-CoV-2, Covid-19, coronavirus, communication, face coverings, facial expressions, face masks.

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Introduction

Healthcare professionals are no strangers to safety measures. For over three decades, The Personal Protective Equipment at Work Regulations 1992 legislation has been the foundation of health and safety in the workplace.¹ Infection prevention and control measures are well established in the

healthcare setting. The global Covid-19 pandemic led to a paradigm shift in the provision of and requirements for personal protective equipment (PPE) across healthcare, resulting in a global surge in demand.

A systematic review by the UK Scientific Advisory Group for Emergencies (SAGE) identified that face coverings significantly aided in the reduction, but





FIGURE 1: Departmental response breakdown.

not the elimination, of the onward transmission of Covid-19 by presymptomatic and asymptomatic wearers.² Infection prevention and control guidelines and standard operating procedures evolved, in line with emerging data and anecdotal evidence. For aerosol-generating procedures (AGPs) in the UK, FFP3 masks were recommended.3 This was met with an increase in the use of fluid-resistant surgical masks in all other instances, including consultations. Within the United Kingdom, 12 million people are affected by some form of hearing impairment and up to 14 million individuals will experience communication difficulties at some point in their lives.^{4,5} As healthcare professionals, we encounter patients who have hearing impairments or patients who are non-English speaking, who may rely on lipreading and non-verbal communication to assist them during consultations, and also paediatric patients. 6-8 The foundations of our interactions with patients are heavily dependent on facial expression, tone and inflection, which help us to communicate treatment plans, obtain valid consent and break bad news.

Here, we evaluate the impact of face masks on communication and the experience of dental staff and patients at a secondary care hospital.

Methods

This service evaluation was registered with the Guy's and St Thomas' NHS Foundation Trust (GSTT) Clinical Audit Registry (audit number 11948). There was no requirement for research ethics committee review.

Survey development and design

The survey questions were generated by identifying themes utilising emerging academic literature on the experiences of healthcare professionals during the pandemic. The questions were reviewed and validated by the GSTT Patient Experience Team (PEX). The PEX is a corporate function that supports and advises teams on a wide range of patient experience activities. Questions included were from the GSTT survey question bank, which contains questions from national surveys (Picker) that have been conducted on behalf of the hospital. All questions have been previously validated. PEX evaluated new questions generated for this survey. The completed surveys comprised 16 questions for staff and 20 questions for patients. The questionnaire was formulated to take no longer than 15-20 minutes to complete.

A combination of open and closed questions was included. Multiple-choice questions using a modified Likert scale were used. Free text questions were included.

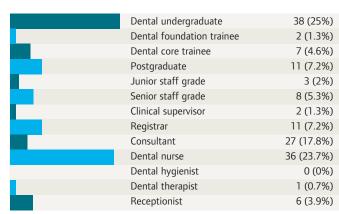


FIGURE 2: Staff grade response rates.

The survey was piloted in a small group of individuals from a variety of professional groups and demographic backgrounds to ensure a representative analysis. Changes to the wording and structure were incorporated based on this feedback exercise.

Survey distribution

We obtained information through the distribution of both paper and electronic surveys among all qualified dental care professionals (dentists, dental nurses, therapists, hygienists, technicians, radiographers), administrative team and patient-facing dental undergraduate students across 12 outpatient dental areas including: acute dental care; oral medicine; oral surgery; dental radiology; restorative dentistry; orthodontics; paediatric dentistry; prosthodontics; periodontology; endodontics; special care dentistry; and, undergraduate clinics. Paper surveys were provided to patients in outpatient clinics (oral surgery, oral medicine, acute dental care, dental radiology, and dental undergraduates) running during the data collection weeks

Data were collected over a four-week period (January 11 to February 5, 2021 - the third national lockdown in England).

Data analysis

Quantitative data were analysed using Civica Experience cloud-based software solution, which enables access to results, and collation and analysis of data. A thematic analysis was performed on qualitative data and triangulated with three clinicians (PA, BC and MO).

Results

Quantitative and qualitative data: dental care professionals

A total of 166 dental staff undertook the survey. The overall response rate was 166/568 (29.2%). Respondents were from across 12 outpatient dental departments. Response rate for each question was variable.

Female to male response was 3:1. The majority of respondents (67/165 [40.6%]) fell within the 25-34 age range. Greatest responses were seen in undergraduate clinics (56/154 [36.4%]), oral medicine (26/154 [16.9%]), and oral surgery (26/154 [16.9%]) (Figure 1). Undergraduate dental students made up the largest portion of respondents (38/152 [25.0%]), followed by dental nurses (36/152 [23.9%]), and consultants (27/152 [17.8%]) (Figure 2).

Themes	Table 1: Themes from staff responses.
Clinical	"no objection to wearing masks as it's a prevention""I am grateful to have the appropriate PPE""Myriad of non-verbal facial communication signs are lost, which renders the reassuring smile null and void.""Breaks the human aspect as you can't read facial expressions""Quite daunting for patients we lose the personal touch""Barrier to communication when breaking bad news""Affects overall rapport between dentist and patient"
Physical effects	"I cannot wear my glasses with the FFP3""Difficulty using loupes with a reusable FFP3 and difficulty using microscope with an FFP3""hurt the back of my ears""aching and pain in my masseters/TMJ""Face is full of acne I don't feel comfortable with my appearance"
Psychological	"Find it uncomfortable worried it is becoming a normality" "Makes me sad it has become my identity" "Feel embarrassed to ask people to repeat"
Pre-existing communication difficulties	"Difficulty with hard-of-hearing patients and children"" have to speak very loudly, abnormally loudly"
Communication barriers	"Communication flow is disturbed, tone of voice is affected, which has an impact on showing compassion""biggest problem is not being able to hear or lipread my nurse during AGPs repeating ourselves, shouting and getting frustrated""resorted to writing, prolonged consultation time"

The impact of face masks was varied. A number of qualitative themes were identified: clinical; physical effects; pre-existing communication difficulties; and, communication barriers (Table 1).

Wearing of both types of masks for long periods of time was associated with the development or worsening of temporomandibular joint (TMJ) dysfunction, sore ears, skin itching, sore throats and acne, with the latter resulting in some participants feeling self-conscious about their appearance. Some respondents experienced negative psychological effects from wearing masks for prolonged periods, such as claustrophobia and worry about a 'new normal'. FFP3 masks were worn for one to three hours per day. While wearing FFP3 masks, approximately 56% (50/89) did not find it easy to breathe and 53% (47/88) felt claustrophobic. Aching of the face, ears and TMJ was experienced by 66% (57/86) of respondents wearing FFP3 masks. The largest concern to emerge was the disruption to communication with patients and fellow staff. It was difficult to establish rapport due to the shielding of facial expressions, repetition required, and lack of clarity in speech. Quantitatively, 85% (75/88) often had to repeat themselves while wearing FFP3 masks and 67.4% (60/89) of respondents found it difficult to hear.

All 166 respondents stated that they wore fluid-resistant standard surgical masks for an average of seven to nine hours daily. In contrast with FFP3 masks, 60/163 (36.8%) reported difficulty with breathing while wearing fluid-resistant surgical masks. Over half (57%) experienced soreness and pain from wearing masks. Some 73% (119/164) had to repeat themselves.

While wearing the fluid-resistant surgical masks, 75% (123/164) of respondents had taken verbal or written consent and 38% (60/158) broke bad news.

For some respondents, wearing face masks provided a sense of safety and were a necessary preventive measure to stop the spread of Covid-19, and they were grateful for this. For others, masks adversely affected pre-existing communication difficulties such as in persons with speech difficulties, hearing

Themes	Comments
Gratitude and accessibility	"Thank you for comforting me""Very good to access considering the pandemic"
Clinical service	"Always thorough, professional and friendly service and everything explained clearly"
Visual and audio obstruction	"Difficult to lipread with the masks have to ask to repeat""Difficulty to see who is treating you as they are hidden"
Unconcerned	"No difficulty"
Adjustments	"I no longer wear my hearing aids when I have the mask"

impairments, autism, and in children. Difficulty in conversing with patients whose first language was not English was documented. Many respondents found that face masks posed challenges due to interference with wearing glasses and loupes.

Quantitative and qualitative data: patients

A total of 57 patients completed the survey out of the 100 questionnaires provided, achieving a response rate of 57%. The majority of respondents were female (33/57 [57.9%]), and most were in the 55-64 age range (13/57 [22.8%]).

Some 74% (42/57) of patients who participated spoke English as their first language, with 7% (4/57) documenting a hearing impairment. Some 46% (26/57) of patients were attending for emergency dental treatment, followed by 39% (22/57) who attended assessment-only appointments. The majority of patient appointments (35/57 [61%]) were conducted in an open-layout bay. While attending their appointment, approximately 23% (13/56) of participants received written consent, 27% (15/56) received verbal consent and 16% (9/56) received both. A large proportion of patients did not receive written information leaflets about their condition/treatment (37/52 [71.2%]), nor were they provided with pen and paper to communicate (47/54 [87%]), nor use of animations and images (45/56 [80%]). Over 63% (36/57) reported that PPE worn by staff affected their communication with them.

The qualitative responses from patients covered both provision of clinical service and the impact of face masks. Themes included: gratitude and accessibility; clinical service; video and audio obstruction; adjustments; and, unconcerned (Table 2). Many patients noted that it was difficult to hear staff and read their facial expressions, and made adjustments such as not wearing hearing aids.

Discussion

Effective communication between healthcare professionals and patients is bidirectional, and is pivotal in providing safe, quality care. Communication underpins our exchange of clinical details, building rapport, and in the consent and decision-making processes.

In this study, both staff and patients highlighted how the presence of face masks resulted in them having to repeat phrases frequently and increase speech volume during consultations. Goldin et al. highlighted that medical masks and respirators diminished the higher frequency of a speaker's voice (2,000-7,000Hz) with a decibel reduction. For respirators, this reduction was a significant 12dB, and for medical masks between 3 and 4dB, compared to

when no mask was worn. This, coupled with an open-bay layout typical of most dental hospitals, the use of dental drills that generate 90-100dB, and reverberation of sounds from smooth easy-to-clean surfaces, can amplify pressures already experienced in a noisy environment. 10 In patients who experience hearing impairments or communication deficiencies, this complexity of auditory stimuli may lead to miscommunication.¹¹ The reluctance of individuals to request repeated clarification can also add to this. Patients who are unable to hear or interpret information from a clinician exhibit a greater inclination to hazard 'a guess' on what is being discussed. 12 Anomalies in information obtained can result in discrepancies in clinical information and lead to compromised patient care. Additionally, to compensate for the acoustic attenuation and increased background noise, many may inadvertently violate the privacy and dignity of the patient, particularly when the discussion includes obtaining a medical history, undertaking investigations, or providing a diagnosis and prognosis.¹¹ Positive patient-clinician relationships underpin patients' health behaviours, with disruption unfavourably influencing adherence and clinical outcomes, and the ability to obtain valid consent.¹³

The implementation of face masks conceals visual clues, such as lipreading and facial expressions, that patients rely heavily upon to determine the presence of empathy and the legitimacy of interactions.¹⁴ Non-English-speaking individuals often rely on non-verbal communication and facial expressions to gather data and understanding.

A theme raised by participants was the issue of breaking bad news. Breaking bad news requires empathy and establishing a patient's perception, facial expression being crucial for this.¹⁵ Most standard face masks conceal approximately 60-70% of an individual's face, leading to misperception of emotional state, as many diverse and opposing emotions such as happiness, sadness, anger and disgust can all be perceived as neutral. 16 In real life, the level of attention and inspection of individual's faces may be even less, and further shielded with full-face visors.

Wearing masks for prolonged periods resulted in participants reporting that they felt the face mask had formed part of their identity and something was amiss by not wearing one. Many commented that wearing surgical masks led to acne, rashes and breakouts (PPE-induced dermatoses) and resulted in them not feeling comfortable with their appearance. With FFP3 masks, more pronounced changes in appearance as a result of skin breaching were documented. A high prevalence (97%) of skin damage in frontline healthcare professionals has been reported, including mask-induced pressure sores on the nasal bridge from respirators.¹⁷ The psychosocial impact of scarring, contact dermatitis and acne on the face is well documented, resulting in a significant impact on quality of life.¹⁸

This study highlighted that wearing face masks more frequently has led to difficulty in hearing, with some respondents feeling embarrassed. This may diminish as the use of face masks continues; however, it is an area that requires further exploration due to the negative psychosocial impact on mask wearers. Within our hospital, well-being and support services have been increased and are available for the dental team to utilise, including well-being areas with advisors, occupational health services, and self-care resources.

There were mixed emotions from healthcare professionals regarding wearing face masks for prolonged periods while undertaking treatments and during consultations. Some noted that the experience was "difficult", "challenging", "frustrating" and negatively impacted on the provision of services to patients. Extended use of PPE may cause discomfort from additional weight, heat stress,

dehydration, and the increased need for respiration. This, coupled with restrictions in movement and an increase in dimensions, can increase stress and anxiety. This can cause a shift in tolerance, lowering it for pain and discomfort and leading to more negative associations with its use. 19 Others acknowledged how grateful and happy they were to have adequate PPE due to the safety it provided.

Many patients provided positive feedback about the accessibility of services and the care they received. With limited access to any dental services due to public health-ordered closures of many primary care practices, patients may have exhibited a positivity bias in their responses to their experiences with enhanced PPE.20

There are many resources at our disposal, including the use of virtual and visual aids such as leaflets, diagrams, video animations, mobile phone apps such as Live Transcribe, non-medical-grade clear face masks/face shields, carers and translation services to improve communication when higher levels of PPE are required.²¹ These will permit healthcare professionals to continue adherence to the core principle of effective communication with patients.

There were a number of limitations to our evaluation. The survey was distributed during the third national lockdown when only a skeleton service of dental care was provided due to redeployment of dental staff to vaccination centres, ICU and medical wards. As a result, staff and patient participation was reduced. Questions were not mandatory, which led to a varied response rate. The evaluation of a single secondary referral hospital may not be illustrative of the situation nationally and internationally. Moreover, our hospital guidelines and facilities have adapted with the introduction of micro-motors and reformed ventilation, resulting in changes to certain PPE requirements.

Conclusion

This study provides a valuable and novel insight into the effects of enhanced PPE on the experience of the dental team and patients. Undoubtedly, PPE serves to protect our patients and ourselves; however, the expansion has highlighted the physical and psychological impact on both groups.

Acknowledgements

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CPD questions 1. Surgical masks reduce a 2. Which of the following is a 3. Which of the following is not person's voice by how many considered an aerosoltype of consent? decibels? generating procedure? To claim CPD O A: 3-4dB A: Informed consent O A: CPR points, go to the MEMBERS' O B: 7-8dB O B: Ultrasonic scaling O B: Implied consent SECTION of O C: 12-13dB C: Expressed consent C: Dental fast-handpiece drilling www.dentist.ie and O D: 15-20dB O D: All of the above O: Intra-oral radiographs answer the following questions:



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SARS-CoV-2 is associated with changes in brain structure in UK Biobank

Douaud, G., Lee, S., Alfaro-Almagro, F., Arthofer, C., Wang, C., McCarthy, P., et al.

Abstract

There is strong evidence for brain-related abnormalities in Covid-19. It remains unknown, however, whether the impact of SARS-CoV-2 infection can be detected in milder cases, and whether this can reveal possible mechanisms contributing to brain pathology. Here, we investigated brain changes in 785 UK $\,$ Biobank participants (aged 51-81) imaged twice, including 401 cases who tested positive for infection with SARS-CoV-2 between their two scans, with 141 days on average separating their diagnosis and second scan, and 384 controls. The availability of pre-infection imaging data reduces the likelihood of pre-existing risk factors being misinterpreted as disease effects. We identified significant longitudinal effects when comparing the two groups, including: (i) greater reduction in grey matter thickness and tissue-contrast in the orbitofrontal cortex and parahippocampal gyrus; (ii) greater changes in markers of tissue damage in regions functionally connected to the primary olfactory cortex; and, (iii) greater reduction in global brain size. The infected participants also showed on average larger cognitive decline between the two time points. Importantly, these imaging and cognitive longitudinal effects were still seen after excluding the 15 cases who had been hospitalised. These mainly limbic brain imaging results may be the in vivo hallmarks of a degenerative spread of the disease via olfactory pathways, of neuroinflammatory events, or of the loss of sensory input due to anosmia. Whether this deleterious impact can be partially reversed, or whether these effects will persist in the long term, remains to be investigated with additional follow up.

Nature 2022. doi: 10.1038/s41586-022-04569-5. Epub ahead of print.

Rethinking how antibiotics are prescribed: incorporating the 4 moments of antibiotic decision making into clinical practice

Tamma, P.D., Miller, M.A., Cosgrove, S.E.

Antibiotics save countless lives, but can also cause significant harm including antibiotic-associated adverse events, Clostridium difficile (also known as Clostridioides difficile) infections, increasing antibiotic resistance, and changes to the microbiome (the implications of changes to the microbiome are only beginning to be understood). Antibiotic stewardship programmes have become increasingly commonplace in hospitals in the United States and around the world, but these programmes almost always rely heavily on restrictive practices (e.g., requiring approval before prescribing certain antibiotics) or persuasive practices (e.g., discussions with clinicians regarding the continued need for antibiotics). Although these approaches have had success in improving antibiotic use, they depend on external motivators, and their ability to influence how clinicians will prescribe antibiotics in the absence of an antibiotic stewardship programme-driven intervention is questionable.

JAMA 2019; 321 (2): 139-140.

Duration of effectiveness of vaccines against SARS-CoV-2 infection and Covid-19 disease: results of a systematic review and meta-regression

Feikin, D.R., Higdon, M.M., Abu-Raddad, L.J., Andrews, N., Araos, R., Goldberg, Y., et al.

Abstract

Background: Knowing whether Covid-19 vaccine effectiveness wanes is crucial for informing vaccine policy, such as the need for and timing of booster doses. We aimed to systematically review the evidence for the duration of protection of Covid-19 vaccines against various clinical outcomes, and to assess changes in the rates of breakthrough infection caused by the Delta variant with increasing time since vaccination.

Methods: This study was designed as a systematic review and meta-regression. We did a systematic review of pre-print and peer-reviewed published article databases from June 17, 2021, to December 2, 2021. Randomised controlled trials of Covid-19 vaccine efficacy and observational studies of Covid-19 vaccine effectiveness were eligible. Studies with vaccine efficacy or effectiveness estimates at discrete time intervals of people who had received full vaccination and that met predefined screening criteria underwent full-text review. We used random-effects meta-regression to estimate the average change in vaccine efficacy or effectiveness one to six months after full

Findings: Of 13,744 studies screened, 310 underwent full-text review, and 18 studies were included (all studies were carried out before the Omicron variant began to circulate widely). Risk of bias, established using the Risk of Bias 2 tool for randomised controlled trials or the Risk Of Bias In Non-randomised Studies of Interventions tool, was low for three studies, moderate for eight studies, and serious for seven studies. We included 78 vaccine-specific vaccine efficacy or effectiveness evaluations (Pfizer-BioNTech-Comirnaty, n=38; ModernamRNA-1273, n=23; Janssen-Ad26.COV2.S, n=9; and AstraZeneca-Vaxzevria, n=8). On average, vaccine efficacy or effectiveness against SARS-CoV-2 infection decreased from one month to six months after full vaccination by 21.0 percentage points (95% CI 13.9-29.8) among people of all ages, and 20.7 percentage points (10.2-36.6) among older people (as defined by each study, who were at least 50 years old). For symptomatic Covid-19 disease, vaccine efficacy or effectiveness decreased by 24.9 percentage points (95% CI 13.4-41.6) in people of all ages and 32.0 percentage points (11-69) in older people. For severe Covid-19 disease, vaccine efficacy or effectiveness decreased by 10 percentage points (95% CI 6.1-15.4) in people of all ages and 9.5 percentage points (5.7-14.6) in older people. Most (81%) vaccine efficacy or effectiveness estimates against severe disease remained greater than 70% over time.

Interpretation: Covid-19 vaccine efficacy or effectiveness against severe disease remained high, although it did decrease somewhat by six months after full vaccination. By contrast, vaccine efficacy or effectiveness against infection and symptomatic disease decreased approximately 20-30 percentage points by six months. The decrease in vaccine efficacy or effectiveness is likely caused by, at least in part, waning immunity, although an effect of bias cannot be ruled out. Evaluating vaccine efficacy or effectiveness beyond six months will be crucial for updating Covid-19 vaccine policy.

Lancet 2022; 399 (10328): 924-944.

Tooth loss and cognitive decline in community dwelling older Irish adults: a cross-sectional cohort study

Winning, L., Naseer, A., De Looze, C., Knight, S.P., Kenny, R.A., O'Connell, B.

Abstract

Objectives: To investigate whether tooth loss and related loss of occluding tooth pairs were associated with cognitive decline in a group of communitydwelling older men and women from Ireland.

Methods: A group of 2,508 men and women, aged 50-93 years, underwent a dental examination as part of The Irish Longitudinal Study of Ageing (TILDA). Global cognitive function was assessed using the Mini-Mental State Examination (MMSE). Analysis included multiple logistic regression with adjustment for various confounders.

Results: The mean age of participants was 65.5 years (SD 8.1) and 55.3% of

the group were female. A total of 329 (13.1%) of the cohort were classified as having a low MMSE, with a score ≤27. After adjustment for confounding variables, compared to subjects with ≥20 teeth, the odds ratio for a low MMSE among edentulous people was 1.55 (95% CI 1.03-2.34; p=0.03), and for those with 1-19 teeth was 1.38 (95% CI 1.03-1.84; p=0.04). Having <10 natural occluding pairs and <4 posterior occluding pairs was also associated with a low MMSF

Conclusions: In this cross-sectional cohort study, tooth loss and related loss of occluding tooth pairs were associated with a low MMSE in a group of older adults from Ireland, independent of various known confounders.

Clinical significance: Dentists should be aware of the potential systemic health implications of patients presenting with tooth loss. Tooth loss may be an important risk indicator for cognitive decline.

Journal of Dentistry 2022; 119: 104077.

Quiz answers

Questions on page 60

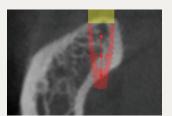


FIGURE 3: Standard 10mm long implant virtually placed in the position LL7. Apex fenestrating through the lingual cortical.



FIGURE 6: Healing of the gingival graft. Note the increased band of keratinised tissue



FIGURE 4: Dental implants placed.



FIGURE 7: Implants restored.



FIGURE 5: Free gingival graft performed



FIGURE 8: PA at crown delivery. Note stable bone levels

Therefore, understanding soft tissue quantity and quality requirements becomes so important. Soft tissue height was around 1.5mm over the implants, which were placed equicrestal. A deeper placement of the implants to compensate for the thin soft tissue was not possible due to the anatomical limitations, so in order to obtain 3mm of soft tissue height and to increase the keratinised tissue, a free gingival graft was performed during the implant exposure (Figures 5, 6, 7 and 8).

2. Apart from the bone availability, soft tissue quality and quantity must be assessed and incorporated into implant planning. A lack of keratinised tissue, along with a

3. A key factor to prevent crestal bone resorption around dental implants is the soft tissue height. Insufficient soft tissue height (<3mm) around implants can lead to bone remodelling and loss. Not only will the implants have less bone support, but if the rough surface becomes exposed to the sulcus, the risk of peri-implantitis will increase.3

1. 2D radiologic images such as periapical and panoramic radiographs offer

insufficient information for planning implant therapy in a safe, predictable, and

aesthetic manner. The American Academy of Oral and Maxillofacial Radiology

recommends the use of 3D imaging for dental implant planning.¹ In this case, the

pronounced lingual undercut cannot be diagnosed in a 2D X-ray. The use of

standard implants would have resulted in a violation of the submandibular fossa.

shallow vestibulum, is associated with a higher risk of developing peri-implantitis.²

Case solution: This case was completed using 8mm and 6mm short implants to prevent lingual cortical perforation (Figures 3 and 4). Crestal bone loss will have a greater effect on short implants due to their reduced osteointegrated area.

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Colm Smith Dental & Specialist Centre, Cootehill and Monaghan. Associate required to replace departing dentist for long-established, award-winning, multidisciplinary practice with specialist orthodontist, oral surgeon, general dentists and excellent support staff. Email CV to drcolmsmith@gmail.com.

Begley Dental are seeking a dental associate for our busy, expanding practice. Excellent remuneration available for the correct candidate. Percentage negotiable. The ideal candidate will be experienced in all aspects of general practice and take a long-term view. Contact fergalbegley@outlook.ie.

Full-/part-time associate required for busy dental practice in Co. Galway. Private/PRSI, 50% split. High earning potential. Great team. Contact drrothwelldental@gmail.com.

Do you want to progress your career providing quality private dentistry supported by dental colleagues with postgraduate qualifications? Attractive package with benefits for a full-time associate in Waterford City. Contact gus.papathomas@dentalcentre.ie for details.

Experienced associate required for excellent three-day position (negotiable) in high-profile, modern, busy clinic. Private, well established and busy book, excellent team and facility. Position replaces departing colleague. Generous terms for right candidate. Contact limerickdentaljob@gmail.com.

Associate dentist required in a private dental practice in Tralee. Permanent part-time (negotiable) available. Apply with CV to info@flynnsdentalcare.ie.

Associate dentist required for busy, well-established north Dublin practice. Full-/part-time position available. Apply with CV to rahenydentalcentre@outlook.com.

Exciting opportunity to join our team in Stepaside Dental. Modern practice, full book, fully private, computerised practice with excellent nursing team and large numbers of new patients to be seen. Associate role available full time, part time also considered. Contact sarahjanedunne@hotmail.com.

Dentists

Excellent position available in Dublin 14 for suitable, experienced candidate to join expanding team in Rathfarnham's longest established practice. Please reply with CV to dentistrathfarnhamdental@gmail.com.

Dentist required for busy clinic in Clane. Fully private. Strong established book. High earning potential. Invisalign training provided if necessary. Full- or part-time position available. Modern, digitalised practice supported by highly experienced staff. Contact louise@clearbraces.ie.

Dentist required for busy, fully private practice in Kerry. Immediate start of one to two days available, with full-time maternity cover from June. Potential to stay in role.

Implants, endo, cosmetic dentistry, facial aesthetics done in practice. Contact info@castleislanddental.ie.

Swords Dental seek a part-time dentist trained in sedation. Busy, modern practice already providing IV and nitrous sedation. Excellent earning potential. Contact colinpatricklynam@hotmail.com.

Merrion Road Dental, south Dublin, is looking for a part-time dentist - two days per week. Fully private, very friendly team. Ideally, two years' post-qualification experience. Contact catnestor@hotmail.com.

Part-time position available for a friendly dentist to join a busy practice in Newbridge. Longstanding patient base, lots of new patients also joining. Great support staff, Aerona software, OPG/CBCT, iTero scanner, 40 minutes from Dublin city centre. Contact shackletonclinic@gmail.com.

We are looking for a dentist to join our team and grow with us. Invisalign training provided and continuous support. Fully digital, modern practice. Contact practicemanager@oneilldentalcare.ie.

Dentist required Cork City for immediate start. One to two days, and full-time maternity cover from July. Potential to stay in role. Digital software, intraoral X-ray and OPG, hygienist, both nurses +15yrs experience, Invisalign, restorative and cosmetic dentistry. Contact astuckenberg@riverleedental.ie.

Dental Care Ireland Virginia has a high-earning opportunity for a dentist to join our established, modern practice. Supported by our skilled, friendly support team. Established books and flexible part-time options. We look forward to hearing from you. Contact careers@dentalcareireland.ie.

Dental Care Ireland Carlow has a full-time opportunity in our established, modern practice. Strong book and great earning potential. Supported by our skilled and friendly support team. We look forward to hearing from you. Contact careers@dentalcareireland.ie.

DentalTech is looking for passionate dentists to join our private, well-established digital practices across Dublin, Wexford and Waterford. Positions up to five days per week, established lists, experience in private high-end removable dentures a plus, excellent earning potential. Contact orla@dentaltech.ie.

Looking for a dentist to join our facial aesthetics team at Sitara Medical Clinic. Locations available: Carlow, Gorey, Waterford. Training can be provided. Email your CV to sanaaskary@live.co.uk.

Dentist wanted for three-surgery dental practice in Donegal Town. Hygienist, orthodontics, implants, OPG, Ceph. Full book, kind staff, great patients. Contact siomurr@hotmail.com.

Enniscorthy – Smiles Dental is looking for a passionate dentist to join our state-of-theart, well-established, fully private practice in Enniscorthy, Co. Wexford. Position offers five days per week, established patient book, excellent earning potential plus up-front bonus! Contact Sophie.Collier@bupadentalcare.co.uk.

Gate Dental Galway is looking for an enthusiastic dentist to join our fully private practice. We can offer two to four days per week, established patient list, high earning potential and modern technology surgeries including a Cerec CAD CAM and 3D CBT scanner. Contact Sophie.Collier@bupadentalcare.co.uk.

Dentist required for a well-established, modern and private practice in Dublin 13. Flexible hours, a full diary. Experience preferable. Surgery caters for implant, orthodontics, and oral surgery. CBCT and digital OPG. Excellent support staff. Small on-site lab. Contact hygieneplacement@gmail.com.

Dentist required Cork city. Two days per week. Immediate start. Well-established, friendly and busy practice. Reply to oscardermody@gmail.com.

 $\label{eq:part_problem} \textit{Part time dentist required for a busy practice in north Dublin. Private and PRSI patients.}$ Digital X-ray. Friendly, supportive team, great environment. Contact northdublinclinic1@gmail.com.

Looking for an enthusiastic, passionate, highly skilled dentist to join our team. Private, modern practice with a focus on providing our patients with high-class dentistry. Fully digital, CEREC, Invisalign, implants. Part-time, will grow to full-time. Contact morgan@blackrockdental.ie.

Part-time position available for enthusiastic dentist. Terribly busy general/specialist practice located in Bray, Co. Wicklow. Must be willing to work Saturdays. High remuneration, modern, custom-built facility. Contact: begleycaitriona@yahoo.ie.

Dentist required for our busy, modern private practice. Full-time or part-time. Stateof-the-art equipment with digital scanner. Position suits an enthusiastic associate who wishes to develop with a progressive team. Excellent earning potential. Contact northdublindentalassociate@gmail.com.

We are looking for general dentists to join our locations in Limerick, Roscrea, and Blackrock (Dublin). We offer a joining bonus, a partnership programme, relocation financial assistance, mentorship programme and multidisciplinary clinics. Contact jobs@shieldsdentalclinic.ie.

Looking for dentist to work in Dr Paddy Crotty's Dublin private practice for three-anda-half to five days - maternity cover starting mid-June. Potential to stay in role. Invisalign, cosmetic and general dentistry. Great earning potential. Excellent support. Contact crottysmiles@yahoo.com.

We are looking for general dentists with orthodontic/Invisalign experience to join our locations in Limerick and Roscrea. We offer a joining bonus, a partnership programme, relocation financial assistance, mentorship programme and multidisciplinary clinics. Contact jobs@shieldsdentalclinic.ie.

Shields Dental is seeking orthodontists, prosthodontists and periodontists for Limerick, Roscrea and Blackrock (Dublin). We offer a joining bonus, a partnership programme, relocation financial assistance, mentorship programme and multidisciplinary clinics to suitable candidates. Please send CV to jobs@shieldsdentalclinic.ie.

Want to work on great patients in Ireland's most advanced clinic? Due to dentist going overseas, busy book available immediately full or part time. Mentorship and training opportunities available. Very high earning potential. Contact ed@seapointclinic.ie.

Full-time, experienced, enthusiastic dentist required for busy, well-established, mostly private general practice in Celbridge, Co. Kildare. Supportive, progressive environment. Replies with CV to brian.corcoran26@gmail.com.

Are you looking for a practice with an excellent local reputation and among dental peers? Are you looking for mentoring and flexible hours, in a fully digital private practice? If so, contact us on info@naasdental.ie.

Part-time dentist required for busy modern mixed practice, full book, part time with a view to full time. CV to info@priorydentist.ie.

Great opportunity to join our state-of-the-art dental practice in New Ross. Fully digital practice with TRIOS scanner and on-site acrylic laboratory. Second-to-none staff support and hygiene department. Part-time and sessional work available. Contact dillondental2@gmail.com.

Full-/part-time dentist required in expanding, busy practice in south Dublin City. Fully digital and private. Multidisciplinary and supportive team. Immediate start. Contact job@crowndental.ie.

Dentist required for award-winning Lucey Dental & Aesthetics in Greystones. Join a multidisciplinary team in a high-technology, five-surgery, fully private practice including CBCT. Full- and part-time dentists required. Experience essential. Excellent remuneration. Contact manager@luceydental.ie.

Dental Care Ireland Ennis currently has a high-earning opportunity for a dentist to join our established modern practice. Strong book and fully supported by our experienced, skilled support team. Flexible part- or full-time options. Contact careers@dentalcareireland.ie.

Dentist required for busy practice in west Clare coastal town. Full book guaranteed, mainly private/PRSI. Digital X-rays and OPG, R4 software, fully trained support staff, days negotiable. Contact niallmcrty@gmail.com.

Locums

Oral surgeon required to cover a maternity locum in Limerick City from May for three to six months. Busy, modern practice, excellent support staff. Contact normaocob@gmail.com.

Specialists/limited practice

The Crescent Clinic is seeking an endodontist and periodontist to join our team in Clontarf. Please email aileen.hogan@crescentclinic.ie.

Position available for a periodontist with a full routine and surgical waiting list. Implantology may also be part of this role depending on experience of the applicant. Please visit www.southdownclinic.com for more details.

We are recruiting for a restorative dentist. It is essential that you have experience and knowledge of implantology. We also welcome applications from general dentists with an interest in implantology. Please visit www.southdownclinic.com for more information

Opportunities for dentists with special interests in practice and specialist dentists -Smiles Dental have orthodontist, endodontist, oral surgery and prosthodontic positions available across their practices including Dublin. Please get in touch to find out more! Contact Sophie.Collier@bupadentalcare.co.uk.

Oral surgeon required for Cork City practice. Monthly clinic with a busy book. Private work. Contact oscardermody@gmail.com.

Orthodontist required Cork suburb, three days per week for maternity cover 9.00am-5.00pm starting June. Option to stay on one day per week. Full book, excellent support staff, on-site dental lab with dental technician. Excellent remuneration. Please contact if interested. Contact miriamcatb@icloud.com.

Orthodontist required to join well-established, friendly Cork orthodontic practice, one day per week, own patient list, excellent support and remuneration, on-site lab, full book, immediate start. Please contact if interested. Contact carmel@corabbeydentalclinic.ie.

Oral surgeon and endodontists required to join our existing busy oral surgery team. Modern specialist clinic with on-site CBCT, sedation, PRGF, etc. Contact tomas.allen@kingdomclinic.ie.

Specialist orthodontist positions available at Dublin Orthodontics. State-of-the-art facilities with iTero and Trios scanners. Support from a team of experienced specialists, orthodontic therapists and support team. Excellent remuneration. Flexible working hours that will suit your lifestyle. CV to elaine.hand@dublinorthodontics.ie.

Endodontist position available in Dublin 4 at Leeson Dental Clinic. We have had an inhouse endodontist for over 20 years and this position has become available. Very large surgery with office. Excellent facilities and remuneration. Email info@leesondentalclinic.ie.

Grange Clinic is looking for fantastic part-time specialists or dentists with special interest in practice (DWSIs) to join our wonderful team inclusive of, but not limited to: DWSI or specialist orthodontist; oral surgeon/implantologist - DWSI; or, endodontist. Apply today! Contact recruitment@smartdentalcare.co.uk.

Orthodontist needed for sessions in Dublin 3 general practice. Established orthodontist list since 2006. Current orthodontist leaving. Excellent support staff. Enquiries to office@fairviewdentalclinic.ie or contact Patrick on 01-833 8985 for further details.

Dental technicians

Cork City multi-surgery practice requires a dental technician full time in house. Very busy, good earning potential. Flexible hours. Contact corkcityassociate@gmail.com.

Dental nurses/receptionists/managers

Dental nurse required to join busy west Dublin dental practice. Experience essential. Full-time position with immediate start. Contact tonydentist51@gmail.com.

Full-time dental nurse required. This is an exciting opportunity for you to work in our brand new, state-of-the-art, modern, friendly and forward-thinking multidisciplinary practice. We are located in Briarhill Business Park, Galway. Contact shauna@3dental.ie.

Part- or full-time experienced dental nurse/receptionist required for busy Cork City general dental practice. Contact corkcitydental@gmail.com.

Cork City multi-surgery practice requires a full-time dental nurse. No experience needed. Contact corkcityassociate@gmail.com.

Experienced dental nurse required for busy general dental practice in Killaloe, Co. Clare. Four days per week. Contact joe@networksolutions.ie.

We are looking for an experienced, qualified dental surgery assistant to fulfil the role of senior clinical nurse/team lead for our busy, modern, private and PRSI general practice in Drumcondra. Please email laura@drumcondravillagedental.ie.

A motivated, friendly dental nurse/receptionist required for a part-/full-time position in our modern, private practise in Skerries. Friendly support team. Organised with good typing skills preferred. Please forward your CV to yoursmile2612@gmail.com.

Ormond Orthodontics. Qualified dental nurse required for our Kilkenny/Thurles orthodontic practice. We are seeking a warm, friendly person with good communication and computer skills. Email application to reception@ormondorthodontics.ie.

Dental hygienists

Part-time dental hygienist required for busy, modern practice in Ranelagh. Contact info@beechwooddental.ie.

Dental hygienist required for well-established, busy, friendly practice in Limerick. Kava PROPHYflex, new dedicated hygienist surgery. Flexible days/hours. Contact no8sarah@gmail.com.

Hygienist position available two to three days per week in very busy private practice. Milltown and Caherciveen, Co. Kerry. Contact macalison@hotmail.com.

Galway Dental Clinic is looking for a warm, welcoming hygienist for locum cover with potential for part-time permanent position. Established book, fully computerised, Cavitron, CT. Friendly, supportive and progressive dental team. Contact info@galwaydentalclinic.ie.

Part-time hygienist required for busy, friendly practice in Cork City. Full support given. Days/hours flexible. Contact corkdentalhygienist@gmail.com.

Dental hygienist required for a busy, modern and well-established private clinic in Clare. Fully computerised and excellent support staff. Flexible days/hours. Contact dr.odonovan@alexandradental.ie.

Dental hygienist required for a busy practice in Swords. Continued support and training available. Contact practicemanager@oneilldentalcare.ie.

Dublin north city near M50. Hygienist required for six months starting April 18, 2022. Two to three days per week. Busy, multidisciplinary practice with excellent remuneration. Please email your CV to orthosull@gmail.com.

Part-time hygienist required for our busy dental clinic in Dublin 12. Fully computerised with a dynamic, friendly team and excellent support. Favourable terms. Contact info@cleardentalcare.ie.

Part-time hygienist. Maternity cover position available for busy, long-established, friendly practice in Oranmore, Galway. Reply with CV to info@orantowndental.ie.

Part-time hygienist required for our busy, modern and well-established private dental clinic in Dublin 22. Hours available Monday 8.00am-1.00pm, Wednesday 2.00pm-8.00pm, Friday 1.00pm-8.00pm, and Saturday 9.00am-5.00pm. Established book, fully computerised, Cavitron, Kava PROPHYflex. Contact vicky@3dental.ie.

Colm Smith Dental & Specialist Centre Cootehill and Monaghan requires full-/parttime hygienist for busy dental practice with specialist orthodontist, oral surgeon, endodontist and general dentists. Flexible hours available. Please apply with CV to drcolmsmith@gmail.com.

Dental hygienist required for Saturdays in a busy, modern, private clinic in Dublin 13. Fully computerised. Excellent support staff and remuneration. Contact northdublindentalassociate@gmail.com.

We are looking for a pleasant and self-motivated hygienist to join our team. Duties will include basic and advanced periodontal treatment, oral hygiene instruction and the placement of fissure sealants. Two days per week. Contact redmonddental@gmail.com.

We are looking for a friendly new hygienist to join our team in Rathfarnham, Dublin 14! Flexibility on hours. Lovely patients. Reply to rdphygienist@gmail.com.

Hygienist position available one to two days per week in very busy private practice, Ballina, Co. Mayo. Contact burystreetdental@gmail.com.

Deansgrange Dental Clinic is accepting applications for a part-time hygienist. Private and PRSI. Full book, computerised and supportive team. No late evenings or weekends. Contact careers@deansgrangedental.ie.

Lucey Dental & Aesthetics has a great position for a dental hygienist. You will work closely with our in-house periodontist and dentists as part of a multidisciplinary team. Fully private practice. Excellent remuneration package and benefits. Contact manager@luceydental.ie.

PRACTICES WANTED

Orthodontist with an interest in buying a practice, or in an associate position with potential for transition to partnership/ownership in the next four to five years. Available to start late 2022. Dublin area is ideal but interested if good opportunity available countrywide. Contact orthodontisttransfer@gmail.com.

PRACTICES FOR SALE/TO LET

Long-established single-handed practice in Letterkenny. Central location. Principal retiring. Currently private/PRSI. Excellent potential to expand. Requires equipment investment. Ideal as 'satellite' practice for northern practitioner. Reply to sweeney mb@hotmail.com.

Midlands. Top-class, two-surgery, extremely busy private practice. Long-established, very loyal patient base, excellent location. Strong new patient numbers, fully private. Computerised, digitalised. Extensively equipped. Excellent profits. Large base for growth. Contact niall@innovativedental.com.

Limerick. Top-class, private, well-established, very busy practice. Modern/walkinable premises with good room to expand. Digitalised, computerised, excellent equipment. Good profits - low rent. Very strong new patient numbers. Principal available for transition. Contact niall@innovativedental.com.

General practice closing in three months. Owner retiring. All offers considered for lease, goodwill, equipment. Solid loyal patient base. Very low DTSS numbers. Enquiries to galwaypractice1@gmail.com.

Cork City – well-established practice, integral part of community, high footfall, three surgeries with potential to expand. Contemporary/walkinable, separate

decontamination area, digitised/computerised, realistically priced. High new patient numbers, excellent profits, large ability to group. Contact niall@innovativedental.com.

North Co. Mayo, large town on the Wild Atlantic Way. Long-established, singlehanded, mixed practice. Plenty of room for growth potential. Owner retiring. Contact niallkilroy@yahoo.ie.

South Dublin - long-established, two-surgery, fully private practice. Prestigious location, primary care centre. Reasonably low overheads. Plentiful parking on site. Good new patient numbers. Top-class equipment. Active hygienist. Huge potential. Principal available for transition. Contact niall@innovativedental.com.

Established for 25 years, busy two-surgery dental practice for sale in south west Mallorca. Very well located in a busy shopping centre with easy parking. The dental clinic was reformed in 2018/19. New digital X-ray including OPT. Contact susietaylor2003@yahoo.co.uk.

Tralee, Co. Kerry. Superb opportunity to purchase turn-key, excellently located, topclass, modern, two-surgery practice. Fully kitted-out lab. Room to expand. HSE inspected. Ground floor access. Property: flexible options, freehold/leasehold. Speedy sale. Contact niall@innovativedental.com.

Three surgeries, room to expand. Long-established practice, private, PRSI and medical card. Excellent equipment and good parking. Principal retiring. Contact 086-225 4708 - evenings only.

Thriving general practice in south Tipperary town with potential for expansion. Three surgeries. Owner retiring. Freehold/leasehold negotiable. Contact seirldent@gmail.com.

Two-surgery mixed practice for sale south west Dublin. Very busy. Leasehold or freehold. Long-established, digital, etc. Free parking, high turnover, low overhead. Principal retiring but can remain to facilitate handover. Contact fiachloir86@gmail.com.

South Dublin city centre. Active, private, busy two-surgery practice, excellent location. Modern equipment – HSE standards. Long-established/good footfall. Surrounded by Government, technology offices. Digitalised/computerised. Priced to sell. Large potential for growth. Principal available for transition. Contact niall@innovativedental.com.

Galway city centre. First-floor dental suite to let. Two treatment rooms, waiting/reception/office, kitchen/sterilisation, toilets. €25,000 p.a. Service charge €900. Contact mikemarykav@hotmail.com.

EQUIPMENT FOR SALE

Used Planmeca Intra Digital intra-oral X-ray and fully equipped dental chair TECN+Dent with compressor. Contact dublinsurgery@yahoo.co.uk.

Brand new X-Guide implant navigation system including latest X-Mark. All accessories. Unused. New price €40,000. Would accept €29,500. Contact tomas.allen@kingdomclinic.ie.

Brand new in box Bicon Implant Motor Electric Drill System and hand piece to go with the electric drill system €1,700. Original cost €2,121. Contact guy@whitesmiledental.ie.



As a member of the Irish Dental Association you can use this logo on your website and other practice material. Contact aoife@irishdentalassoc.ie for details.

Stronger together

Originally from Dublin, Ronan King trained as a Chartered Accountant, and joined the Board of the IDA as one of two independent nonexecutive directors in 2020.

What is your background, and how did you come to join the Board of the IDA?

I qualified as a Chartered Accountant with KPMG and set up my own practice in 1984 in Bray before merging with Simpson Xavier in 1987, where I spent 18 years, primarily in management consulting. I took early retirement in 2005, and since then have pursued a portfolio career. I've been actively involved in recent years as an independent non-executive director, and have been heavily involved in Chambers of Commerce, serving as President of Bray Chamber from 1985-87 and of Dublin Chamber in 2007.

I took part in an open competition process with the IDA in early 2020. Two appointees - myself (in a Communications and Advocacy role) and Geraldine Kelly (Governance and Risk) - took up our roles in September 2020. This is the first time in 100 years that there have been non-dental members of the Board.

What is your role on the IDA Board?

Dentists have suffered in the last number of years from what I would call official apathy towards them as a profession and what they contribute to healthcare. That's evident from issues such as the fact that the Dental Act was passed in 1985 and hasn't been upgraded, and from the cuts in the subsidies granted under Governmentsponsored schemes. The IDA has recognised the need to move communications and advocacy centre stage and, in the face of this official apathy and inertia, to turn up the heat to achieve critical change. My role is to work with the Management Committee and Executive, and with external advisers, to ensure that these critical issues are addressed.

What skills do you feel you bring to the Board?

I'm not a dentist - I think differently! Dentists are highly credible, highly qualified, and highly intelligent individuals, but they have traditionally been narrowly focused on the purely dental dimension. What Geraldine and I try to bring is to broaden that, not because it is

Ronan King has joined the IDA Board as a non-executive director.

wrong, but because no organisation is an island, and we need to exist and participate in a wider business and political community. While I have a financial and business background, I also have experience in not-for-profit/withpurpose organisations and in developing policy positions. I think this has equipped me, among other things, to lock horns with civil servants on many diverse issues and to achieve change.

What is your impression of the IDA as an organisation?

The IDA is very professionally run by a committed and hardworking Executive, and a very active Management Committee, who are working hard on a number of critical issues. Yet, it can be a challenge to get dentists to come out and speak on these subjects. I am concerned by the relative inactivity and lack of engagement by many dentists, given the crises facing the profession. In financial terms, the case for membership is compelling, yet significant numbers of dentists on the Register are not members. We need to understand why and how they can be brought into the fold.

> Dentists need to be more vocal. They need to be more active in the community. They are the leading professionals delivering oral healthcare, and yet we have an oral health policy that practitioners weren't even involved in defining, which is a disgrace. The way that the Department of Health has chosen to treat the profession is wrong, and the profession has no choice but to push back.

How would you like to see the Association progress into the future?

I would like to see a marked improvement in the treatment of the profession by politicians and civil servants. The IDA should be a 'must join' for all dental professionals.

In 2023, the IDA is celebrating its centenary. I see that as a potential rallying post, that throughout 2023 we should be seeking to increase the voice and the profile of dentists, and increase the relevance of membership. Nī neart go cur le chéile - there is no strength without unity. We need to convince people that you are better off being inside the tent and making the changes, rather than criticising from outside.

Ronan is married to Edel, and they have four children and five grandchildren who he says are "a joy". He's a keen golfer, and enjoys all sports.

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7 year term 6.47% (6.67% APR*)

10 year term 6.97% (7.20% APR*)



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