SUMMER 2024
Strasbourg, FRANCE

EDSA *Magazine*

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European Dental
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EDSA Magazine

Product News

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FROM THE EDITOR

Dear readers,

It is with great pleasure that I welcome you to this special edition of our magazine, which coincides with the 74th EDSA General Meeting in Strasbourg, France. As we focus on the critical topic of global oral health, this edition brings together insights, research, and perspectives from students, professionals, and stakeholders across the globe.

This meeting also marks a significant personal milestone as it concludes my tenure as the Vice President of Public Relations on the EDSA board. It has been an incredible journey, one filled with collaboration, growth, and the unwavering support of our vibrant community.

I would like to extend my thanks to all the students who have contributed their time, energy, and creativity to this magazine and to our association's initiatives. Your passion and dedication inspire us all and drive our mission forward. To our stakeholders and sponsors, your continued support and partnership have been invaluable in making our projects and this publication possible. Your commitment to advancing oral health and dental education has been a cornerstone of our success.

As we turn the page to a new chapter, I am filled with optimism for the future of EDSA and the next generation of dental professionals. I hope this edition of the magazine provides you with valuable insights and inspiration.

Warm regards,

EDITOR-IN-CHIEF
JOSHUA KENNEDY

EDITORIAL TEAM

Dear EDSA Family,

I must say that I feel a little heart-broken because this term is coming to an end. It is always a pleasure for me to work for EDSA with its wonderful people all around Europe. In this term we were honored to work for these amazing issues of EDSA Magazine and I really hope that you enjoyed it both! I wished to be in this excellent meeting with you as well, I couldn't but I know that you are having a wonderful time in Strasbourg and enjoying our summer issue! Let's hope to see you at the next EDSA Meetings!
Lots of love,
Buse

BUSE SARAÇ, CO-EDITOR

Dear readers,

It is my pleasure to present this issue of the EDSA Magazine where you'll find articles filled with inspiration and education. Our team has worked tirelessly to edit and design this magazine to ensure that each piece has reached its full potential!

On a personal note, with this being my final edition as co-editor, I want to express my gratitude for working with such a dedicated team. This experience has been incredibly enriching, and I'm truly excited to watch EDSA continue to grow in the future!

YAQOUB IMRAN, CO-EDITOR

Dear EDSA readers,

I am delighted to introduce you to the EDSA Magazine's Summer edition. The motivation to publish articles continues to rise every year, and each edition includes a topic that is both intriguing and up-to-date in the field of dentistry.

I am thankful I had the chance to work with such a fantastic team throughout the year and was able to acquire experience that will remain with me forever. I hope you will enjoy exploring this issue.

IVA BILOŠ, CO-EDITOR

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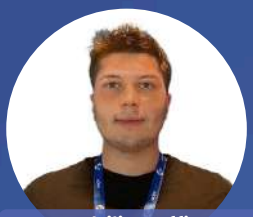

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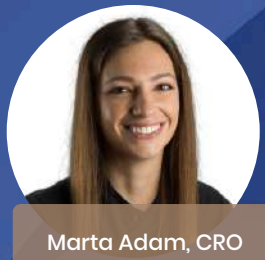

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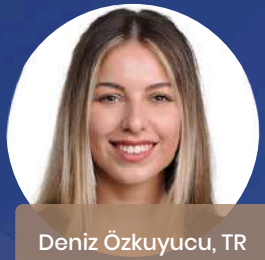

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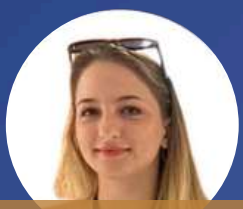

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2023/24 Delegates


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North Macedonia
Ana Stojanova


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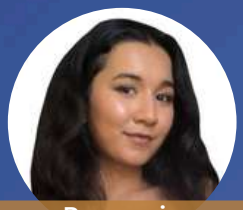
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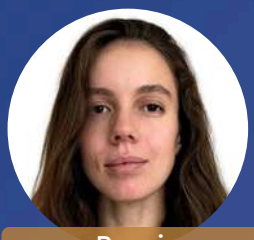
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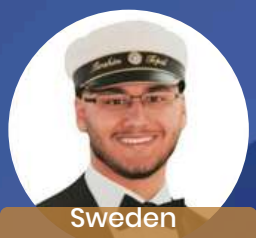
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curaden academy

iTOP INDIVIDUALLY TRAINED ORAL PROPHYLAXIS

Curaden Academy @74th EDSA General Meeting Strassbourg 2024, from 18 to 23 August.

The Curaden Academy will be present at the 74th EDSA General Meeting with an interesting lecture and two hands-on iTOP workshops. Do not miss this opportunity to expand and deepen your knowledge on biofilm management and preventive oral care.

Lecture: iTOP (individually Trained Oral Prophylaxis) and behaviour change in oral health: creating inspiring routines in daily oral care

It is well known that proper management of the oral biofilm is the key to preserving our natural teeth for life. And not only that: oral health affects overall health, happiness and quality of life. However, mechanical plaque control, or toothbrushing, is perceived by our patients as an obvious, mostly boring act, as easy as child's play. So why is it that oral diseases still affect around 45% of the world's population and have a higher prevalence than any other non-communicable disease? Together we will explore the failures of existing prophylaxis and the challenges of patient relationship and motivation in biofilm management.

Wednesday 21 August/ 9.00 to 10.00am
Faculty of Dental Surgery of Strasbourg, Amphitheater
Speaker: Dr. Camelia Roman

iTOP Workshops

In these hands-on workshops, you will practice biofilm management techniques and learn the right tools to implement effective preventive oral care, with certified iTOP instructors leading you on this exciting journey.

Wednesday 21 August/ 2 sessions: 2.00 to 4.00pm and 4.15 to 6.15pm
Faculty of Dental Surgery of Strasbourg, 8 Rue Ste Elisabeth, 67000 Strasbourg

PRESIDENT OF EDSA

Dear EDSA Family,

This is your president, Deniz, and I am feeling so lucky to have a page in this amazing summer issue of the EDSA Magazine, which is an inseparable part of EDSA.

Firstly, I would like to welcome everyone to our 74th EDSA Strasbourg Meeting this summer. I hope you will enjoy this meeting and keep this magazine as a memory of it.

While writing these words, I need to confess that I am feeling intensely emotional and proud. I am now approaching the end of my EDSA adventure as the EDSA president which started when I was a 2nd-year dentistry student. Exactly 6 years! That's why I consider myself to have graduated from the EDSA faculty in addition to dentistry. If the second one didn't exist, I wouldn't love the first one as much as I do now. In these 6 years, EDSA has given me friends that I never want out of my life and that I will never want out of theirs, skills that I could not have acquired otherwise, a network whose value I understand more and more each day, and memories that I will never forget for the rest of my life.

From serious general assemblies to crazy dance stages, I would like to thank EDSA for making my life colorful even in the most difficult times. I think everyone who has contributed even a single idea to this association since 1988 should be proud of EDSA in its current image.I am sure that EDSA's relentless energy and evolution will continue to make me proud as a retired former president in the years to come.

I don't want to keep you from reading this magazine that has been diligently worked on. As you can imagine, I have the potential to write about EDSA forever!

While reading this magazine, I hope you are enjoying the Strasbourg meeting organized by my lovely EDSA Board and esteemed local organizing committee.I wish you a fruitful meeting!

See you soon in Portugal!

Kind regards,

Deniz Naz Bilgiç
EDSA President

PRESIDENT-ELECT OF EDSA

Dear EDSA Family,

I am thrilled and honored to address you today as the President-Elect of EDSA! This moment marks a significant milestone in my journey with this organisation—a journey that has shaped my growth both personally and professionally over the past five years.
Starting as an EVP participant in my first year, I've had the privilege of witnessing firsthand the profound impact our association has on dental students across Europe. From my roles as Social Media Co-Lead and Community Manager to Vice President of Internal Affairs, each step has been a learning experience filled with opportunities to develop leadership skills, build meaningful connections, and work tirelessly towards our shared goals.

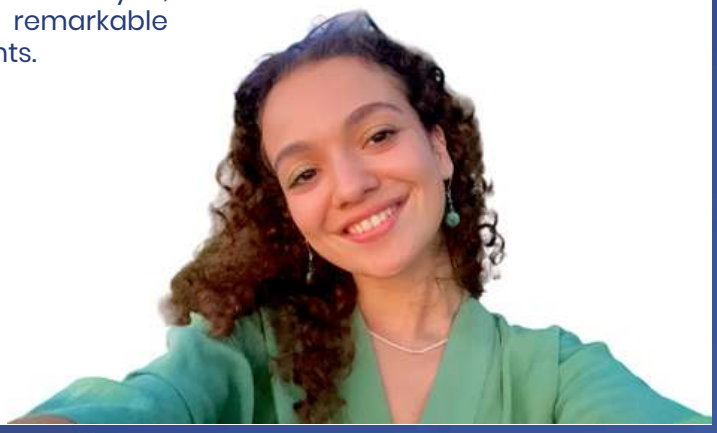
Every event attended and every person met has enriched my understanding of EDSA's strengths and areas for growth, shaping my vision for our future. One of my primary goals is to enhance accessibility and ensure everyone feels empowered to participate fully. To achieve this, I am planning to introduce a StarterPack that provides clear guidance and resources for every participant, ensuring that meetings and documents are understandable and accessible.
Furthermore, I am excited about exploring avenues to enhance our social media visibility. Whether through strategic partnerships, targeted advertising campaigns, or innovative digital strategies, we will amplify our message and engage with a wider audience of dental students and professionals.

In addition to one-on-one handovers, I am keen to implement structured board handovers and establish a training program for trainers within EDSA. This will ensure continuity in leadership and empower our members with the skills needed to excel in their roles. I also plan to implement a pre-meeting checklist to streamline our operations and enhance the effectiveness of our meetings.

To further enhance transparency and accountability, I am planning to implement regular reports from both the Board and delegates every three months. These reports will provide insights into our progress, challenges, and opportunities, fostering continuous improvement and ensuring that our efforts are aligned with our strategic objectives.

To extend our impact, I am eager to collaborate closely with external partners on concrete projects that benefit our members and the broader dental community. Whether through joint educational initiatives, research partnerships, or advocacy campaigns, these projects will strengthen our position as a leading voice in student advocacy across Europe.
More than just an organization, EDSA is a family—a community where our shared love for dentistry, effective communication, and genuine friendships thrive. This community has been my anchor throughout my dental school journey, and it is my heartfelt desire to ensure that every member feels valued, empowered, and inspired to contribute.

As I step into the role of President, I am filled with excitement, purpose, and a deep sense of responsibility. I am eager to embark on this journey with each and every one of you, confident that together, we will achieve remarkable milestones and propel EDSA to even greater heights.



Kind regards,

Ezgi Yeşiltan
EDSA President-Elect

PRESIDENT OF STRASBOURG

Charlotte Carter

74TH EDSA GENERAL MEETING

"Thank you so much for trusting the Strasbourg Local Organisation Committee to host this EDSA meeting. As the General Secretary, I can tell you that being both Co-President and General Secretary is not something I would recommend—definitely don't try this at home! (Marta warned me) However, it has been an amazing experience, and I have learned so much from it and the warmth of the EDSA community makes it all worth it. I want to thank everyone involved and hope that this meeting will remain in your memories forever, especially as it is my last as part of the Board ! Don't hesitate to come and meet us, meet friends and make lifelong friendships!"

Co-President Timothée: "We would like to express our gratitude for placing your trust in the French team to organize this meeting. It is an honor to welcome you to Strasbourg and to share our culture with you. For many members of our team, this conference represents the final major commitment of our student years. It has been a privilege to work once again with my friends from UNECD (french dental student national association), and I thank each of them for their dedication. What an experience! We eagerly anticipate sharing unforgettable moments with you and hope they will meet your expectations. We have poured our energy into every detail to ensure its success. The adventure is about to begin, and we are excited to embark on it with you."

73RD EDSA GENERAL MEETING

The 73rd EDSA Meeting, a significant event for dentistry students, recently took place at the iconic Palace of the Parliament in Bucharest. This gathering brought together aspiring dental students from across Europe, fostering an environment of collaboration, learning, and innovation. Over several days, attendees engaged in a series of lectures, workshops, and networking opportunities, all aimed at advancing their knowledge and skills in the field of dentistry.

The Committee of Delegates, comprising representatives from each participating country, served as a dedicated forum for addressing internal challenges and fostering collaborative initiatives. This select group of delegates engaged in focused discussions, leveraging their diverse perspectives and expertise to devise practical solutions for common issues. Their primary objectives included streamlining communication between member associations, enhancing educational standards, and promoting best practices within the field of dentistry. Through these deliberations, the Committee aimed to strengthen the network of European dental students, ensuring a unified approach to professional development and cross-border cooperation.

A series of enlightening lectures were delivered by EDSA alumni and other esteemed dental professionals, each designed to provide valuable insights and practical knowledge to future dentists and equip future dentists with essential knowledge and skills for their careers. These sessions covered a diverse array of topics, including the latest advancements in dental technology, innovative treatment methodologies, and effective patient communication strategies. The speakers, drawing from their rich professional experiences, provided valuable insights into the evolving landscape of dentistry, emphasising practical advice for navigating the challenges of modern practice. Attendees had the unique opportunity to learn from seasoned professionals, gaining inspiration and guidance to help them excel in their future endeavors within the field. These topics of the lectures included:

EDSA General Meeting in Bucharest

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LECTURES

1. iTOP - The Way to Become a Great Oral Health Professional: New Concepts of Biofilm Management by Dr. Camelia Roman:
Dr. Roman presented innovative approaches to biofilm management, emphasizing the importance of personalized patient care and advanced hygiene techniques. Her lecture offered new concepts that can significantly enhance oral health outcomes, making it a must-attend for those aiming to excel in patient care.

2. Patient Habits - Unsolvable Mystery or Once in a Lifetime Opportunity by Dr. Ana Stevanovic:
Dr. Stevanovic explored the complexities of patient behavior, discussing how understanding and influencing patient habits can transform dental practice. She provided strategies to turn these challenges into opportunities for improving patient compliance and long-term oral health.

3. Alternative Paths for Graduated Dentists: The Dental Industry by Dr. Friedrich Buch:
Dr. Buch discussed the various career opportunities available in the dental industry beyond traditional clinical practice. He highlighted roles in research, product development, and corporate leadership, offering a broader perspective on how graduates can leverage their dental degrees in diverse ways.

4. Tooth Transplantation - Expanding the Horizons of Prosthetics by Dr. Cristina Rizea:
Dr. Rizea introduced the concept of tooth transplantation as a viable alternative to conventional prosthetics. She detailed the clinical procedures, benefits, and case studies, showcasing how this innovative approach can expand treatment options and improve patient outcomes.

WORKSHOPS

THE 73RD EDSA MEETING ALSO OFFERED A SERIES OF HANDS-ON WORKSHOPS, EACH DESIGNED TO PROVIDE PRACTICAL TRAINING AND ENHANCE THE SKILL SETS OF FUTURE DENTISTS. THESE WORKSHOPS INCLUDED:

1. How to CAD/CAM: This workshop introduced participants to Computer-Aided Design and Manufacturing (CAD/CAM) technology, teaching them how
to use digital tools for designing and fabricating dental restorations with precision.

2. First Steps in Suturing Techniques: Aimed at beginners, this session covered the fundamental techniques of suturing, providing hands- practice
in creating secure and effective stitches for various dental procedures.

3. Alveolar Ridge Preservation: From Science to General Practice: This workshop bridged the gap between scientific research and clinical practice,
demonstrating methods to preserve the alveolar ridge post-extraction, thus maintaining the integrity of the dental arch.

4. Direct Restoration of Posterior Teeth: Participants learned the latest techniques for direct restoration of posterior teeth, focusing on materials
and methods that ensure durability and aesthetic outcomes.

5. iTOP - The Way to Become a Great Oral Health Professional. New Concepts of Biofilm Management: This session provided innovative approaches to biofilm management, emphasizing personalized patient care and advanced oral hygiene techniques.

6. Dentsply - Blue vs Gold: Duel or Duet: A comparative workshop that explored the differences and synergies between
Blue and Gold endodontic file systems, guiding participants on their appropriate applications in clinical scenarios.

7. SLS - Simplified Layering System: Focused on composite restorations, this workshop taught a simplified layering technique to
achieve optimal aesthetic results with efficiency and accuracy.

8. Pediatric Pulp Management: This session covered contemporary strategies for managing pulp health in pediatric patients,
highlighting techniques to preserve vitality and promote long-term oral health.

Each workshop was meticulously designed to provide practical, hands-on experience, ensuring participants could directly apply the skills learned to their future dental practices.

The 73rd EDSA Meeting featured a dynamic research competition, providing a platform for dentistry students to showcase their innovative research projects. This event allowed participants to present their findings on a wide range of dental topics, from clinical studies and technological advancements to public health initiatives and educational methodologies. Each student had the opportunity to deliver a detailed presentation, supported by visual aids and followed by a Q&A session with a panel of esteemed judges and an engaged audience. The competition not only highlighted the students' dedication and expertise but also fostered a spirit of scientific inquiry and collaboration. It served as an invaluable experience for aspiring dental professionals to gain recognition, receive constructive feedback, and inspire their peers with cutting-edge research that could shape the future of dentistry.

For the local organizing committee, the 73rd EDSA Meeting Bucharest was not just a professional endeavor, but it was a personal journey marked by dedication, passion, and countless hours of hard work. For each member, seeing the event come to fruition was a moment of immense accomplishment. From securing venues to coordinating logistics, every detail was meticulously planned and executed with care, reflecting our commitment to excellence.

Beyond the personal triumph, the meeting holds great significance for our national association - Bucharest Dental Students' Association. It served as a platform to highlight the strengths and achievements of the national association, paving the way for future collaborations and opportunities as a capable and reliable partner within the European Dental Students' Association network.

On a personal level, for each dental student the meeting represents a significant milestone - an opportunity to showcase their skills, talents, and dedication to their peers from across Europe. It's a chance to forge lasting connections, exchange ideas, and foster a sense of unity among dental students from diverse cultural backgrounds. For many, it's a once-in-a-lifetime experience that leaves an indelible mark on their professional and personal lives.

In essence, the 73rd EDSA Meeting Bucharest was more than just a gathering—it was a celebration of teamwork, dedication, and the collective passion for dentistry. It's a testament to what can be achieved when individuals come together with a shared vision and a commitment to excellence.

The LOC of The 73rd
EDSA Meeting Bucharest 2024

INTERNATIONAL CLEFT CARE

Dr Chloé Rolland
Consultant in Orthodontics with
a special interest in Cleft, Cambridge
Orthodontic Specialist, London,

Can you share with us your journey from studying dentistry at the University of Bristol to specialising in orthodontics at Queen Mary, University of London? What inspired you to pursue orthodontics?

My interest in orthodontics started as a teenager when I lived in Paris. My orthodontist was extremely approachable and very good answering my incessant questions. What interested me in orthodontics was the problem-solving aspect as well as the 3D planning which I found comparable to engineering at the time.

While at university, I was fascinated by craniofacial development and the effects of the interruptions to that process. This is that led me to choose projects that had more of a cleft and craniofacial focus throughout my training. I was also very lucky to be exposed to two wonderful mentors: Professor Jonathan Sandy, Orthodontist, and Professor Andy Ness, Epidemiologist, who were both very involved in national cleft research.

After completing five years orthodontics at Bristol and then I spent a couple of years in South Wales gaining some experience in general dentistry and then working in a maxillofacial unit. I had the opportunity to spend some time in the Cleft centre in Swansea. I later moved to London to gain more experience in other specialties such as oral medicine and paediatric dentistry before I was able to integrate an orthodontic training programme at the Royal London Hospital.

The final few years of my training were spent specialising in cleft and craniofacial orthodontics at Great Ormond Street Hospital. Despite being during the pandemic those were probably the most incredible years of my training because of how much I was exposed to.

Your research on surgical outcomes of patients with complex craniofacial anomalies sounds fascinating. Could you tell us more about your findings and how they contribute to improving patient care?

The research undertaken during my doctorate was part of a wider project looking at the outcomes of midface advancement on children born with craniosynostoses. Some of the children born with such condition can develop abnormal skull shape, facial features and life-threatening conditions such as raised intracranial pressure and obstructive sleep apnoea.
I measured the airway of children undergoing these interventions both before and after the procedure. This helped understand the effect of surgery on airway dimensions and how it affected their sleep apnoea.

It's central to understand how an intervention will affect individuals both in terms of function and aesthetics so that we can better counsel patients (and their parents) regarding their treatment options. It's also important that research is undertaken in multi-disciplinary setting so that you can ensure that care is looked at holistically, rather than focussing on one clinical parameter.

It's impressive that you've been involved with the Cleft UK International steering committee and recently participated in a charity visit to Bangladesh. Can you share some insights into the challenges and successes you've encountered in promoting sustainable and high-standard cleft care internationally?

My involvement with the Cleft UK charity started when I was appointed as a consultant in orthodontics. Cleft UK is a charity **focused on providing permanent, sustainable ways to improve cleft care in both the UK and overseas. They support** research in the UK and help teams in lower income countries to set up their own mult-disciplinary centres for cleft care.
As part of that work, I've visited a Cleft and craniofacial unit in Dhaka, Bangladesh, alongside other clinicians from other disciplines (plastic surgery, speech and language therapy, audiology, maxillofacial surgery and nursing). Our goal has been to help provide education and training, donating much-needed equipment and support the team remotely as they run their centre.
The ethos of the charity is not to send large teams to operate on a large number of babies without providing follow-up. Other cleft charities are also learning to move away from this old-fashioned model as it is unlikely to be sustainable and can sometimes create sequelae that cannot be managed by the local team, if not appropriately trained.
We are lucky to have been invited several times by the local team. One of the most memorable visits for me was last summer, when a small team of us visited Dhaka to teach plastic surgeons and orthodontists about the importance of alveolar bone grafting as part of a comprehensive pathway of care.

What I've particularly enjoyed about Cleft UK is that the focus is really on supporting the host team rather than intervening surgically on mission visits. The charity's aim has been to build a sustainable model and to avoid imposing the western point of view onto the local team's approach.
I think it's very easy to get things wrong with any charitable intervention particularly overseas. It's particularly important to ask yourself what the host team really need from you rather than to set up a replica of your working model in Europe or the US.
It has been really challenging to support dental health and education in the Dhaka centre. The population being treated is extremely deprived and do not all have access to toothbrushes and toothpaste. In addition, there are mixed messages when it comes to oral health; I've seen fluoride-free toothpaste being promoted to under-3s in a context where the caries rate is extremely high.
We've helped with Producing oral health education messages in Bangla and providing free toothpaste and toothbrushes for all the new patients who attend the centre. These are all small steps but they're going in the right direction towards making dentistry a priority in the unit.

How do you balance your clinical practice, research endeavors, and involvement in charitable initiatives such as CLEFT charities? What motivates you to stay engaged in these diverse activities?

By always choosing topics or initiatives that I am passionate about, I've been able to keep motivation in the research and clinical work that I've undertaken. I'm lucky tat my clinical expertise and charitable work are in the same field, so it does not feel like a burden to take on.

There are times when there are not enough hours in the day to complete everything. It's important not to take too much on at once or you can risk becoming overwhelmed or burned out early in your career. I am learning to try to say no to opportunities if I have too much on my plate.

Finally, could you share a memorable patient case or experience that has had a significant impact on your career as an orthodontist?

It's very hard to pick one moment but I was particularly pleased the other day when one of my speech and language therapy colleagues told me that a young cleft patient had been talking about me. She has been explaining that although she disliked going to see the dentist, she had started to look forward to coming in to see me for treatment because she had noticed an improvement to her teeth and because we had started to build a rapport. It's heartwarming to hear that patients feel at ease with you, in a context which can be daunting or uncomfortable at times for them.
I'm most proud when my patients complete their orthodontic treatment beaming and feeling more confident about their smile.

GLOBAL ORAL HEALTH

PROFESSOR JENNIFER GALLAGHER
Ambassador International, Engagement & Service King's College London
Newland-Pedley Professor of Oral Health Strategy/Hon Consultant in Dental Public Health
Faculty of Dentistry, Oral & Craniofacial Sciences
King's College London

Making a difference

Why did you study dentistry? I suspect many of you wanted a 'professionally contained career in healthcare' (2), that will enable you to 'balance' professional and personal life (3). Sociologists suggest that health professionals are primarily motivated by money and status, but I would argue that health professionals really do want to make a difference to individuals (4), the organisations in which they work (5), and wider community and systems (6). But how? That is the important question to ask. Curiosity is vitally important in health professionals - so cultivate it now. Keep questioning yourself and others as to how we can improve population health, prevent disease, retain an energised workforce and meet the needs of patients through the delivery of high-quality evidence-informed contemporary care, ideally in strengthened health systems. Healthcare across Europe has been shaken by the global pandemic. Things will not and must not remain the same. So, we must ask who should do what, where, when why and how to emerge with better systems?

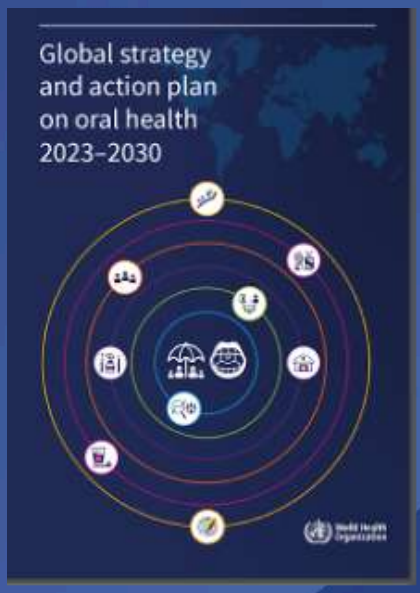

FIGURE 1. GLOBAL STRATEGY FOR ORAL HEALTH

The role of public health in dental education

Entering university to study dentistry, we readily get caught up in the wonders of studying the human body, diagnosing and treating oral and dental disorders, learning and applying techniques appropriately, to the extent that we sometimes lose sight of the patient behind the lesion, tooth or mouth - and may have to be reminded of this by our clinical tutors and senior academics. There are so many aspects to patient care that it seems impossible to hold them all together – but you will! Much will become intuitive as you gain experience in the practice of dentistry.

Somewhere during your programme, you hopefully will study some aspects of dental public health, albeit that curricula differ (7). It often feels strange because it is less tangible and may only be theoretical. It may even lack visibility, be labelled as community dentistry or contained within special care dentistry or paediatric dentistry or even public health. Yet all regulators of education recognise the importance of equipping you to' serve society' (8), not just individual patients, and doing so effectively means looking at the world differently. To prepare yourself, it is helpful to get out there and see different parts of the world. Electives and Erasmus programmes provide an important opportunity to do so. For me personally, an elective in the Democratic Republic of the Congo (formerly Zaire) in the penultimate year of my BDS degree was truly formational. I assisted with individual patient care, visited community child health initiatives and a lot more besides, within what I now realise was a very well designed and very forward-thinking 'hub and spoke' health system which even included a training school.

Do of course identify and connect with key players in your own dental school and university. See what public health initiatives you can join or shadow – from community programmes to research. Find out about your local and national populations, their health and trends. Which community initiatives have a stronger evidence base, eg toothbrushing with fluoride toothpaste in schools rather than merely dental health education. Learn about your health system, its strengths and weaknesses; and debate future options. Maybe even find the policies to which you can respond if there is an open consultation by your government.

FIGURE 2. GLOBAL BASELINE REPORT

Dental public health in practice

When you qualify as a dentist, whatever country you are in, you should be equipped to be a 'safe generalist' in many disciplines, including dental public health. This means that you have a wider perspective in working in society (8); from 'upstream' action at policy level, to 'midstream' initiatives at community level) (9), as well as being equipped to work 'downstream' with individual patients to deliver evidence-based prevention(9).

Remember your desire to make a difference as a health professional. Wherever you start to work, learn about your local community and its socio-demography, patterns of oral health and dental service use. Observe and listen to them. Think about what that might mean for how you practice and serve them in your dental surgery and in the wider community. Some well-meaning initiatives may not be effective – so reflect on how you can draw on the evidence-base in shaping your practice, contributing to your organisation and serving the local community.

We need your generation of graduates to shape the delivery of care differently. Oral diseases are public health problems (1, 10). So prevalent that they are normalised – yet they are largely preventable. If you haven't done so already, look at the Global oral health strategy and action plan from the World Health Organization (1). Public health leaders globally have been busy preparing this strategy (Figure 1) in response to the call from member states, together with baseline information globally (10) shown in Figure 2 and for Europe in Figure 3 (11). It is time for action. Figure 1, 2, 3

FIGURE 3. EUROPEAN BASELINE REPORT

Public Health Leadership

Public health leadership is required to deliver the six strategic objectives of the Global Strategy & Action Plan (1). There are two 'simple' but challenging overarching targets to which we will all contribute:

A: Universal Health Coverage (UHC) for oral health: By 2030, 80% of the global population is entitled to essential oral health care services.

B: Reduced oral disease burden: By 2030, the combined global prevalence of the main oral diseases and conditions over the life course shows a relative reduction of 10%

Drivers for change

The world does not sit still. So, in addition to the above, let me share some big issues to think about as we shape future care (Table 1). Dental education and the practice of dentistry will need to adapt to cope with a wide range of 'drivers for change' including:

REFERENCES

TABLE 1: KEY DRIVERS FOR CHANGE

Key drivers for change	Examples
Environmental	• There is much to be done to deliver sustainable dentistry including minimising travel, maximising reuse and recycling; promoting prevention and effective self-care to maximise benefits and minimise damage to the environment
Demography & Health:	• How can we best to care for people across the life course and particularly our ageing dentate populations in Europe.
Social and economic:	• Public and patient expectations and demands keep changing and their ability to afford dentistry is affected by the economic climate so we must work to reshape healthcare. • Healthcare professions are also seeking to work differently in future and we need to explore how best to use our skills and expertise across the dental team.
Science & technology:	• We need to push the boundaries of knowledge and also work out how to better apply the evidence we hold. • Some of you will hopefully become clinical academics contributing to education and research.
Politics & policy:	• Leadership in action involves influencing politics and shape policy, taking a strategic approach so that health and access to care improve. • Policies are needed to address health inequalities.

"WE NEED YOUR ENTHUSIASM, EXPERTISE, DRIVE AND LEADERSHIP AS WE SHAPE THE FUTURE. THE FUTURE HEALTH AND WELLBEING OF THE PUBLIC MATTERS!"

The role of Artificial Intelligence (AI) in do-it-yourself (DIY) and direct-to-consumer (DTC) orthodontics: European dentists call for caution

The rise in AI empowers the dental profession but also unveils the harsh reality of unethical and dangerous abuse of patients' health by commercial-driven stakeholders in the world of DIY/DTC orthodontics. The Council of European Dentists (CED) is a European not-for-profit association which represents over 340,000 dentists across Europe. It was formerly called the EU Dental Liaison Committee (EU DLC), but its name was changed in May 2006.The association was established in 1961 and is now composed of 33 national dental associations from 31 European countries.

Dr Freddie Sloth-Lisbjerg,
President,
Council of European Dentists

The future we have been talking about is already here:
The world of dentistry has changed significantly in the last decades and a lot of this evolution is the result of advancements in digital technologies. Advancements in eHealth allow us to manage our day-to-day work faster, to access patient records with one click, to visualise the expected results of a treatment – and these are only a few examples. This also includes significant developments in the field of AI, which is already impacting the field of dentistry, mostly in a positive way but at times also opening the door to stakeholders that unfortunately use AI for unethical and dangerous purposes. An example of this is DIY/DTC orthodontics where the dentist is excluded from the process, either partially or from start to finish.

AI – a dentist's friend or foe?
AI can help with a number of tasks and activities in the dental practice, and is likely going to become even more prominent in the work of the future generation of dentists. Nevertheless, a number of CED member associations and chambers have been reporting concerning developments in the field of AI and DIY/DTC orthodontics. Significant uptake in situations where a dentist is not at all involved in diagnosis, treatment and follow-ups in DIY/DTC orthodontics are observed among our members. Orthodontic devices are produced with no contact from a dentist and therefore, without any of the standard, required actions for a safe, effective orthodontic treatment – e.g. clinical and radiographic examination. Even the dental impressions end up being taken by the patients or, as a best case scenario, dental auxiliaries.
As such, against the backdrop of all the opportunities AI can offer, a word of caution must be issued: no matter how progressive AI technologies become, the lack of involvement from a qualified dentist and/or specialist orthodontist will ultimately lead to endangering patients' health. As such, in this case, the nature of AI problems with treatment lies not in the technology itself, but rather in the potential for abuse in the hands of stakeholders with purely commercial interests, treating citizens as customers, instead of patients whose health should come first.

The impact of DIY/DTC orthodontics on the patient:
Companies market DIY/DTC orthodontics as hassle-free, inexpensive and simple. AI has a contributing role in this, making turnaround processes for such orthodontic devices even quicker. Nevertheless, the lack of involvement from a dentist and/or qualified orthodontist from start to finish presents many dangers to the patient's health. Examples include decrease in the patient's self-esteem, neuromuscular disorders and even teeth loss, to name a few. It is therefore crucial to ensure that DIY/DTC orthodontic companies are forbidden from providing orthodontic services that do not include the robust, direct involvement of a dentist/and or qualified orthodontist from start to finish. Furthermore, patients should be made aware of their rights in such situations, and of the dangers of such unsupervised orthodontic treatment.
Unfortunately, this is not the case now. In some instances, patients are even made to sign non-disclosure agreements in relation to the DIY/DTC treatment, essentially restricting opportunities for outspoken complaints afterwards.

The impact of DIY/DTC orthodontics on the dentist:
While the primary issue of DIY/DTC orthodontics remains patients' health and wellbeing, it also has the potential to place the dentist in 'grey' territory when it comes to responsibility and liability issues. As dentists, we are fully committed to ethical, safe and responsible treatment and respect the sacred relationship between healthcare professional and patient. Decisions for treatment are taken through the expertise of the dentist and with the informed consent of the patient. The dentist bears the responsibility for the treatment outcomes.
However, when the dentist is excluded/ not fully involved in the DIY/DTC orthodontic treatment process, and the patient's health is damaged, this poses questions of liability. If a patient comes to a dental/specialized orthodontic practice following an unsuccessful treatment, it is up to the dentist to offer treatment and to try and improve the outcome of someone else's unethical and dangerous actions – this has the potential to open the door to ethical and legal issues.

Looking forward – how to improve the situation?
The CED has been actively discussing this issue and adopted a Position on AI and DIY/DTC orthodontics in November 2023. We are also already looking towards the next EU mandate of 2024-2029, and the issue of DIY/DTC orthodontics is among the highlighted topics in our Manifesto for the new EU policy-makers. As European dentists, it is in our hands to continue challenging such DIY/DTC companies as illegal and dangerous, and to actively call on the relevant authorities to place the necessary restrictions that will protect patients and dentists alike. Furthermore, the dentist's role as the treatment lead must continue being respected and prioritized. This also means understanding the supporting role AI can take in enhancing treatment and diagnosis but only through the expert involvement of the dentist. This is a battle that the next generations of dentists will need to lead as well – ensuring the proper balance between our own expertise and knowledge and the vast opportunities AI technologies could offer will remain a central issue for the future of dentistry.

CED
COUNCIL
OF EUROPEAN
DENTISTS

THE VALUE OF EDSA

JAMES COUGHLAN
EDSA President 2020-2021

How do you believe your experiences as EDSA past president prepared you for your current academic and career pursuits?

My time at EDSA taught me to focus on research that can have an impact, that is useful for policymakers, whether that is in universities, governments or dental clinics. During the pandemic, we carried out a Europe-wide survey on the impact of Covid-19 on dental students and used this data to advocate for students at the European level, sharing the results with the deans of dental schools and with other European stakeholders. We had to understand what information was important to those making policy, and how best to collect this data. I now work on how dentistry is financed, but the same principles apply; how can I collect and use data to help improve things for those most affected.
Being President also introduced me to a huge network of people working in dentistry, public health and academia. You meet and work with professionals who are world leading in their fields, many of whom are extremely generous in offering help in your future career. Many of the people I met during this time have been instrumental in helping me to succeed in my career so far, especially my academic career, such as being involved with a research project for the WHO.

In your opinion, what are some of the most pressing issues or opportunities facing dental students and professionals in Europe today?

This is a tough one! For me, one of the toughest things for dental professionals in Europe is navigating social media. While ensuring good aesthetics for our restorations is important, our primary focus as dentists must be to protect oral health. We are increasingly seeing people attending wanting complex, expensive full mouth rehabilitation because of what they have seen on social media, but many people do not have the level of oral health to safely carry this out. In these cases, such treatment is harmful.
With the pressure from patients to have the perfect smile, and the temptation of "fame and fortune" for new dentists who see glamorous clinical photos online, I worry that we will see more adults needlessly losing teeth because of overtreatment – which is why engaging with minimally invasive dentistry and ensuring ethical treatment is so important.
On a more positive note, there are more opportunities than ever for dentists and dental students to develop their professional lives in new and interesting ways. Whether that is combining clinical work with public health and community engagement, incorporating environmental sustainability into their practice, utilising digital health or specialising, we are now seeing dentistry engage with a much broader field of topics. Having that ability to create your own varied, fulfilling career is rare, and as dental professionals we are lucky to have this.

How do you see yourself contributing to the advancement of the dental profession, both through your academic pursuits and any future leadership roles you may undertake?

It's difficult to know exactly where your career will take you; what I thought I wanted from my career when I was EDSA President, where I was uncertain whether to continue with clinical work, is actually different to what I think now. I am really enjoying the ability to combine my clinical work as a dentist with work on research and policy; they inform each other, and it keeps my mind busy!
What really drives me is ensure that dental policies are effective in helping those who suffer from oral diseases, whether through public health initiatives or by helping people to access high quality dental care. My research work so far has focussed on how dental care can be financed and how to protect people from dental costs that cause them financial stress. There is a lot to work on in this area, both in Europe and globally, which I hope to continue and build on.
As I progress, I also hope to supervise and mentor more dentists to get involved in research; I have been extremely lucky to have had excellent mentors in my career to date, and I would love to give others the same support and guidance I have had.

BALANCING LEADERSHIP AND STUDIES

MARTA ADAM
EDSA PRESIDENT 2022-2023

The journey through dental school is demanding, often requiring a careful balance between academics and personal growth. My experience has been significantly enriched by my active involvement in both my local dental association and the European Dental Students Association (EDSA).

I started by joining my local dental association in my first year. Quickly, I took on various roles, leading projects such as organizing dental health awareness campaigns, coordinating workshops for fellow students, and organizing EDSA projects on a local level such as EVP Zagreb and Summer Camp Dubrovnik. These responsibilities helped shape my organizational skills and broaden my perspective on dental education and public health.

As my confidence grew, I was elected president of the local association. This role brought immense responsibility, including managing ongoing projects and implementing new initiatives to benefit our members. Balancing these duties with my studies was challenging but rewarding. The skills I developed in managing the association—time management, teamwork, and leadership—directly benefited my academic and clinical work.

Simultaneously, my involvement with EDSA offered a broader European perspective. Serving as president, I engaged with students and professionals from various cultural and educational backgrounds. This exposure enriched my understanding of global dental practices and required a higher level of coordination and communication, as we worked across borders to organize conferences, workshops, and exchange programs.

One of my biggest achievements was serving as the president of the local organizing committee for the EDSA Meeting in Zagreb, where I was also elected president of EDSA. This experience stands out as one of the best periods of my life, even though it was very stressful. The challenges I faced were significant, but the satisfaction I felt in leading such a major event made it all worthwhile. The stress of the moment fades, leaving behind the lasting memories of achievement and growth.

EDSA General Meeting in Zagreb

Zagreb

Balancing these dual roles—president of both the local dental association and EDSA—while pursuing my studies was not always easy. There were moments of doubt and stress, but I learned an essential lesson: passion makes time management possible. Setting clear goals, maintaining a structured schedule, and being adaptable were crucial to managing my responsibilities efficiently.

These leadership experiences profoundly shaped my personal and professional growth. I developed greater self-confidence, honed my problem-solving skills, and learned the importance of resilience and perseverance. Leading and working collaboratively with diverse groups has been one of the most significant outcomes of my journey.
To my fellow dental students who feel overwhelmed by the demands of studies and extracurricular activities, I offer this advice: embrace opportunities. The path is demanding, but the rewards—personal growth, professional development, and the satisfaction of making a positive impact—are worth the effort. Time, when managed wisely, can accommodate all your ambitions and passions.

In conclusion, my involvement with both the local dental association and EDSA has been transformative. It has enhanced my organizational and leadership skills and shaped me into a more confident and capable individual. Balancing these roles with my academic pursuits taught me that with passion and proper time management, achieving everything you set your mind to is possible. So, take on challenges, lead projects, and remember that the skills you gain along the way will serve you well in all aspects of your life.

EDSA Board 2022/2023

Croatian Delegation

REPRESENTING PHARMACY STUDENTS

Charlotte Thibault
EPSA Vice President of European Affairs
Unlversity of Grenoble

Can you provide a brief overview of the European Pharmaceutical Students' Association (EPSA) for our readers who may not be familiar with it?

EPSA (European Pharmaceutical Students' Association) is a non-profit organisation representing over 100.000 pharmaceutical students from all over Europe. The Association was established in 1978 and has its headquarters in Brussels, Belgium. EPSA's mission is to actively engage at student and professional levels, bringing pharmacy, knowledge and students together while promoting personal development.

How does EPSA engage with its members and ensure their involvement in its initiatives?

Throughout the mandate, EPSA organises 4 main events: the Autumn Assembly where a General Assembly takes place, the Annual Reception which is the main EPSA advocacy event, the Annual Congress where the new EPSA team is elected, and the Summer University that focuses more on soft skills.
EPSA makes sure to engage its members through educational, professionals, and advocacy topics.
EPSA has a training project that trains its participants on soft skills, essential for the personal and professional life of pharmaceutical students. EPSA organises public health campaigns to make sure awareness is raised on certain topics, aligned with the advocacy strategy of EPSA.
Sciences and educational topics are very central for EPSA and highly explored throughout the years.
Regarding professional affairs, EPSA makes the bridge between the students and the professional world through the mentoring project, which aims to connect mentors with students, ensuring they get the best opportunities from their more experienced peers.
EPSA has its own Twinnet project, to make sure students benefit from mobility initiatives and exchanges.
Last but not least, EPSA engages in advocacy at the European level, through its established presence in Brussels (with the EPSA house and 6 EPSA interns living there), we make sure to be present at all relevant meetings, and events and have regular meetings with stakeholders to ensure the voice of the European pharmaceutical students is being listened to.

EPSA is a partner of the EDSA, could you elaborate on the nature of this partnership and how it benefits both organisations?

Together with the European Dental Students' Association, EPSA is working hand in hand through EHSAA (European Healthcare Student Association Alliance), meeting regularly to exchange good practices, working on policy initiatives together, and raising awareness on the health professions.
This year the collaboration was brought to another level thanks to the organisation of the joint Summer University project, indeed this year all 5 associations (EFPSA, EMSA, ENSA, EDSA and EPSA) are organising their first joint inter-professional event in Portugal.
Collaboration within EHSAA is crucial to make sure we stand as a united front in our advocacy actions.

Can you discuss any recent advocacy efforts or campaigns led by EPSA to address issues affecting pharmaceutical students or the broader healthcare community?

For this mandate EPSA has 3 key priority advocacy topics: Mental Health, Digital Health and One Health.
In March 2024, EPSA organised the Annual Reception in Brussels, this 4 days event gathered 150 European Pharmaceutical students around the topic of mental health. Throughout this event, EPSA organised a programme allowing students to get to know more about European affairs, and European institutions. The core of the event happened in the European Parliament, when on the 19th of March, participants could assist a panel in the European Parliament on the topic of "Mental Health for All, innovative initiatives for a better future", hosted by 2 Members of the European Parliament (MEP Engerer and MEP Joveva), this event was a true success and we hope our main request in making 2024, the European Year of Mental Health will be heard by the European Commission!

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18th-23rd August 2024

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TO FLUORIDATE OR NOT TO FLUORIDATE: DIFFERENT EUROPEAN PERSPECTIVES.

CHLOE ROWE
NEWCASTLE UNIVERSITY, UNITED KINGDOM

Fluoride, a cornerstone of modern dental care, plays a pivotal role in maintaining oral health through preventing dental caries. Through its dual action of promoting remineralisation and inhibiting demineralisation of tooth enamel. As well as inhibiting bacterial enzymes, thereby reducing their ability to produce the tooth-damaging acids (1).

There are a range of localised fluoride delivery options, including fluoride toothpaste, mouthwashes, and varnishes. At a community level, interventions like water fluoridation, milk fluoridation, and salt fluoridation are implemented to enhance population-wide dental health. The World Health Organisation (WHO) recommends maintaining water fluoride levels, artificial or natural, at 0.5 – 1.0 mg/L, with a maximum of 1.5 mg/L. To prevent the potential systemic effects of Fluoride, such as dental and skeletal fluorosis (2).

Naturally High Fluoride Levels

Some regions naturally have high levels of Fluoride in their groundwater, which can occasionally exceed the WHO's recommended limits. In Europe, natural, excessively high levels of Fluoride are seen in Valencia and Catalonia Spain, Tuscany and Sicily Italy as well as areas in Northern Greece, from levels of 2-5 mg/L (3).

In some areas, water treatment plants use defluoridation techniques to reduce the fluoride concentrations. Techniques such as activated alumina adsorption, reverse osmosis, and ion exchange are employed. As well as local water authorities monitoring the levels in the ground water. Implementing and maintaining defluoridation systems can be costly and require significant infrastructure, regions with limited resources may face challenges in deploying these technologies extensively. Therefore, public awareness and education on the risk of high fluoride levels is essential, as well as seeking alternative water sources, such as bottled water (4).

Artificially Fluoridated Water

In Europe, the practice of artificial water fluoridation is implemented in a few select regions. The Republic of Ireland is the most prominent example, maintaining a nationwide water fluoridation program since the 1960s. Additionally, certain areas in the United Kingdom, such as Birmingham, Cumbria, Newcastle-upon-Tyne and Warwickshire, also fluoridate their water supplies. Local regions within Spain, Serbia, and Poland have adopted similar measures. Artificial water fluoridation is a public health measure within these regions, with the sole aim of dental caries prevention (5).

Water fluoridation in the Republic of Ireland has been shown to significantly reduce dental caries and improve oral health. Studies published in the Irish Medical Journal demonstrate fewer cavities in children residing in fluoridated areas (6). National surveys conducted by the Health Service Executive (HSE) consistently report lower levels of tooth decay among both children and adults in fluoridated regions. Public health analysis highlights the cost-effectiveness of fluoridation by reducing the need for dental treatments, benefiting both individuals and the healthcare system (7). Similarly in England, studies and local health reports from Newcastle-upon-Tyne consistently show lower rates of dental cavities in fluoridated communities compared to non-fluoridated areas. Comparing dental fluorosis rates between Newcastle-upon-Tyne and Manchester, which does not fluoridate its water supply, reveals noticeable differences.

In Newcastle-upon-Tyne, studies have reported dental fluorosis affecting approximately 10-15% of the population, primarily in mild to moderate forms, aligning with expected levels from fluoridation. In contrast, Manchester, without water fluoridation, shows lower rates of dental fluorosis, generally less than 5%. These contrasts highlight the trade-offs between reducing tooth decay with fluoridation and managing the risk of dental fluorosis (8).

Previous implementation of artificial water fluoridation

Although only a few select European regions currently practice artificial water fluoridation, during the mid to late 20th century, several other countries also adopted fluoridation as a preventive measure against dental caries. Countries such as Germany, the Czech Republic, Hungary, the Netherlands, Sweden, and Switzerland were among those that implemented fluoridation programs.

Germany, the Czech Republic, and Switzerland have chosen to discontinue water fluoridation primarily due to varying factors rooted in public health policy and public opinion. In Germany, the practice was halted mainly due to concerns over the potential health risks associated with fluoride consumption, including dental and skeletal fluorosis, despite the benefits it offers in preventing tooth decay (9). Similarly, in the Czech Republic, there was a shift in policy influenced by a lack of conclusive evidence supporting the long-term safety and effectiveness of water fluoridation (10). Switzerland's decision was largely driven by public opposition and the belief that fluoride intake should be an individual choice rather than a mandatory public health measure (11).

The ethical debates surrounding water fluoridation are multifaceted, often centring on the principles of mass medication and individual autonomy. Proponents argue that fluoridation is a public health measure aimed at preventing dental caries, particularly benefiting communities with limited access to dental care. They contend that adjusting fluoride levels in water is akin to fortifying food with essential nutrients, promoting overall health. However, critics raise concerns about the ethical implications of mass medication without individual consent, viewing it as a violation of personal autonomy and medical ethics. They argue that individuals should have the right to choose whether to consume fluoridated water or opt for alternative fluoride sources, such as toothpaste or dietary supplements. Additionally, the regions with naturally high levels of fluoride in groundwater further complicate the issue, as residents in these areas do not have a choice in their fluoride exposure.

Moreover, there is ongoing debate about the ethical responsibility of governments in mandating interventions that affect entire populations, weighing perceived benefits against potential risks and respecting varying cultural and personal beliefs regarding health practices (6, 9-11)

Other Public Health Measures for Fluoride Provision

Fluoridated salt is used as an alternative to water fluoridation in various European countries, providing a means to enhance dental health while respecting individual choice. Countries such as Switzerland, Germany, and France have implemented fluoridated salt programs, which have shown positive outcomes in reducing dental caries. In Switzerland, fluoridated salt has been available since the 1980s, with studies indicating significant decreases in caries rates among children. Similarly, Germany introduced fluoridated salt in the 1990s, and research has demonstrated its effectiveness in improving dental health, particularly in areas without water fluoridation. France has also adopted the use of fluoridated salt, observing beneficial effects on oral health. These programs offer an alternative method for fluoride supplementation, allowing individuals to control their fluoride intake more precisely while still gaining the preventive benefits against tooth decay (12).

Fluoridated milk is another method used to improve dental health across various European countries, particularly in areas where water fluoridation is not practiced. Countries such as the United Kingdom, Bulgaria, and Hungary have implemented fluoridated milk programs with encouraging results. In the United Kingdom, a pilot program in parts of England demonstrated a significant reduction in dental caries among schoolchildren who consumed fluoridated milk. Similarly, in Bulgaria, the introduction of fluoridated milk in schools has been linked to decreased caries prevalence among participating children. These programs often target young populations, making it easier to administer fluoride in a controlled manner and ensuring that children receive an adequate amount for dental health benefits. The use of fluoridated milk allows for an alternative fluoride delivery system that can be easily integrated into daily routines, providing flexibility and addressing the needs of communities where water fluoridation may not be feasible (13).

Conclusion

In conclusion, perspectives on water fluoridation in Europe vary widely, influenced by scientific evidence, public health policies, and societal attitudes. While countries like Ireland and some UK regions support fluoridation for its dental health benefits, others like Germany, the Netherlands, and Sweden avoid it due to safety concerns and a preference for alternative approaches. These differing views underscore the ongoing debate and the need for nuanced public health policies that balance benefits, risks, and respect for societal preferences. As research and public awareness progress, ongoing dialogue and evidence-based decisions will be key in shaping Europe's approach to water fluoridation.

REFERENCES

WORLD ORAL HEALTH DAY

LILLY IVANOVA
EDSA PREVENTION OFFICER
PLOVDIV MEDICAL UNIVERSITY, BULGARIA

Introduction

World Oral Health Day (WOHD) is celebrated globally on the 20th of March each year and is organised by Fédération Dentaire Internationale. Each year, EDSA actively participates in this initiative, intending to increase awareness about the significance of oral health and its impact on overall well-being.

Students from our country engage in various educational activities, provide free dental screenings, and promote preventive measures through social media. We are excited to share their campaigns with you and hope to inspire you to organise similar activities in your country for the next World Oral Health Day because a 'Healthy Mouth is a Happy Body!'

Let's take a look at our WOHD Celebration Map:

Bulgaria

The Bulgarian Dental Students' Association organised two activities in which more than 50 students, around 120 children, and their parents participated. The first event took place at the Faculty of Dental Medicine at Plovdiv Medical University in the Pediatric Department, where they provided free check-ups for children and educated their parents about the importance of maintaining good oral health. They also visited several kindergartens to demonstrate teeth brushing techniques to the children.

Czech Republic

The Czech Dental Students Association organised a dental hygiene prevention campaign in orphanages and nursery schools, with over 100 participants. The activities took place in more than 20 different cities including Pilsen, Prague, Hradec Králové, Brno, and Olomouc throughout the entire month. Activities included brushing teeth with the children, learning about the anatomy of teeth and gums, educating the participants about healthy and unhealthy food, and playing educational games such as 'Pexeso' and puzzles.

Portugal

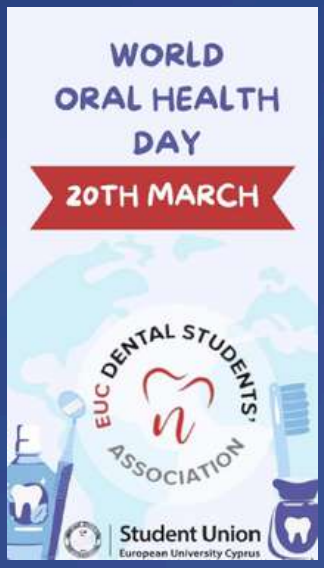
Fifteen members of the Portugal Dental Students Association made a post on their Instagram account, @anemdentaria, to raise awareness of the importance of oral health and provide tips. Additionally, on March 20th, they organised a preventive dental care event at a nursing home.

Slovakia

During the month, over 36 students from the Slovak Dental Students Association took part in three different activities in various cities of Slovakia:

1. World Oral Health Day:
   - They provided instructions on oral hygiene and tooth brushing techniques at dormitories and shopping centres.
2. Oral Health Day with the Slovak Chamber of Dentists:
   - They educated patients and employees in hospitals.
3. Journey to a More Beautiful Smile:
   - They provided instructions for passengers during a six-hour train journey from Košice to Bratislava.

Their hard work led to the education of more than 860 individuals.



Cyprus

Fifteen students from the EUC Dental Students Association created a video featuring dental students and instructors in the clinic explaining why oral health is important. The video was shared via email to all students and was also posted on their Instagram page

Croatia

The Croatian Dental Students Association's public health committee organised activities at public locations to educate people about oral health, oral hygiene, and teeth-friendly diet. Ten students participated in these activities.

Another project was also very successful, with over 24 participants and 40 patients. It was the Geronto Day - an open doors event held at Petar Preradović's square that focused on public health. Additionally, there were oral check-ups at the Faculty of Dental Medicine in Zagreb, with live television coverage.

Italy

Our incredible students from A.I.S.O organised campaigns in various cities across Italy.

A.I.S.O. Napoli Vanvitelli set up a pop-up stand at an A series basketball game, where they distributed free oral care products and provided education on common oral diseases and prevention methods to over 2000 participants.

A.I.S.O. Padova

A.I.S.O. Foggia

A.I.S.O. Roma La Sapienza

A.I.S.O. Firenze

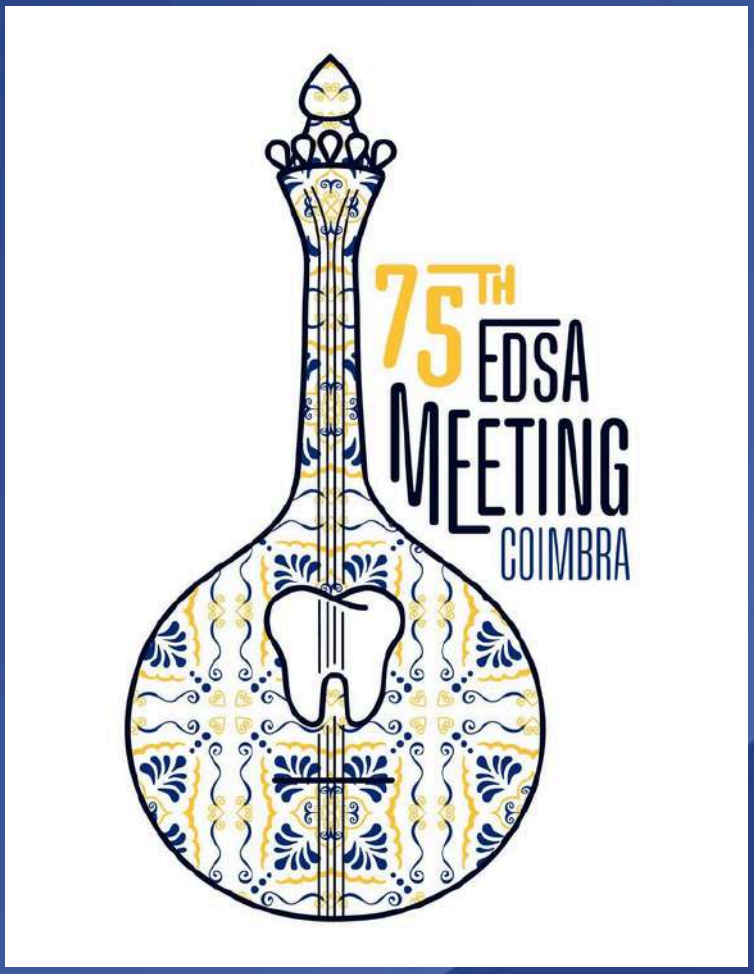
A.I.S.O. Tor Vergata

Thank you all for your invaluable contribution to World Oral Health Day. Your dedication and support have truly made a difference in promoting oral health awareness.

75TH EDSA GENERAL MEETING

BIANCA GOMES,
PRESIDENT OF THE LOC EDSA MEETING COIMBRA 2025
UNIVERSITY OF COIMBRA, PORTUGAL

My journey in EDSA started when I accepted the role of delegate for the Portuguese Dental Students' Association (Associação Nacional de Estudantes de Medicina Dentária) back in 2022. Since then, I've been trying to involve Portuguese students as much as possible by promoting EDSA projects among them. I also continued organising some exchange programs, like EVP Viseu, and created new ones at my university, such as the International Clinical Exchange Program for IADS. As time passed and I started to understand more about the role of a delegate and the amazing opportunities EDSA offers us, I aimed to become an even more active delegate. For ANEMD, being a member of EDSA means a lot because we get to learn how larger associations work and how dental education is structured across Europe, raising the standards in our own country.



ANEMD

The EDSA Meetings I attended in Istanbul and Liverpool were enough to make me realise how amazing it would be to host such an event at my university. Coimbra might seem like just a small city in Portugal, but I have no doubt that we have one of the strongest student communities. When I presented this idea to my colleagues, they were very motivated to make it happen and to put Coimbra in the spotlight. Our strongest motivations were the impact this event would have on our local community, motivating students to get more involved at an international level, and on our national association by showing our partners our full potential and possibly gaining more visibility in the Portuguese dentistry field.

Coimbra is known for being home to the country's oldest university, founded in 1290. Recognized as a UNESCO World Heritage site for its historical buildings and vibrant cultural traditions, the University of Coimbra draws numerous tourists annually. It is known as the city of students, so it offers a unique academic atmosphere that leaves no one indifferent.

This will be the second time the EDSA Meeting takes place in Coimbra, the first being in 2016 when it was combined with a national student congress, gathering more than 400 participants. It was a great success back then, and we are really invested in making it a memorable event once again. I believe our LOC has been working with the goal of giving all the participants one of the best weeks of their lives! Put Coimbra on the map and save March 29th – April 4th, 2025, to experience tradition and feel saudade!

76TH EDSA GENERAL MEETING

BY ROISIN TANG,
PRESIDENT OF THE LOC EDSA MEETING DUBLIN 2025
TRINITY COLLEGE DUBLIN, IRELAND

Welcome to the 76th EDSA general meeting!
Dia dhaoibh a chairde! As the LOC President for the 76th EDSA Summer General Meeting in 2025, it is with great honour to host the most esteemed event in the heart of Ireland's capital city.

What makes Dublin a standout choice for hosting the 76th EDSA general meeting?
I believe that Dublin is an exceptional choice for the 76th EDSA general meeting due to its unique balance of academic prestige, vibrant cultures and historical scenery. The city's dedication to sustainability aligns with many dental professionals' goals in maintaining a green environment.

Furthermore, ADEE (Association for Dental Education in Europe) will also host their meeting in Dublin next year in the Business School at Trinity College Dublin. This will establish partnership with our EDSA event and enhance networking opportunities for students attending the summer meeting and dental educators attending the ADEE meeting.

EDSA DUBLIN
2025

What special events or social gatherings are planned to enhance the overall experience?

To start off, there will be a welcome night-out at the Hyde Rooftop, offering stunning views of Dublin. This gathering provides an opportunity for attendees to meet in a relaxed environment with plenty of games, refreshments and entertainment highlighting the ultimate Irish culture.

There will be three night-out events at Workman's Club, Krystle's Nightclub and Dicey's. All located within the heart of the city centre.

"Dublin is the fourth UNESCO City of Literature," according to WHO, with plenty to see and do. Attendees can explore the infamous, "Old Library" where you can view the "Book of Kells" at Trinity College Dublin, enjoy traditional Irish music at any classic Irish pubs, and experience Dublin's famous hospitality.

What special events or social gatherings are planned to enhance the overall experience?

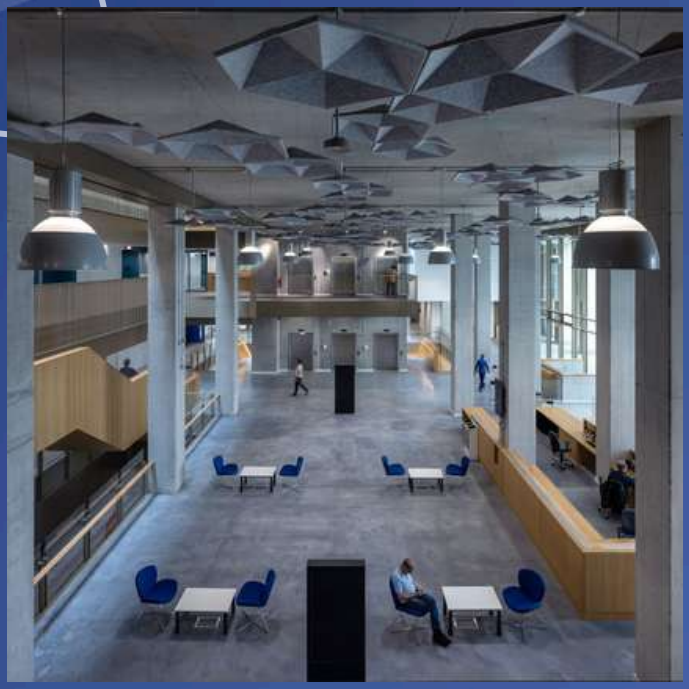
A formal gala dinner will be hosted at the Morrison Hotel. This elegant event will include a 3-course meal, wine, live music, speeches and all attendees will have a formal dress code of dresses and suits. It will be a night of celebration, networking and the recognition of outstanding contributions in the field of dentistry amongst all attendees.

A traditional Irish-themed scavenger hunt beyond Trinity College campus will feature activities such as a campus landmark hunt and social media challenges, concluding at Doyle's Pub. This will allow attendees to socialise and meet other students.

Dublin

What special events or social gatherings are planned to enhance the overall experience?

Conferences will be held over three days in the TUD campus, delivered by dedicated guest speakers. These gatherings will allow dental professionals to discuss modern technology and share insights and new skills. Attendees can enhance their skills through hands-on training sessions and technology demonstrations.



In addition to the conferences, interactive workshops with dental sponsors will encourage active participation and engagement amongst all participants. These sessions will focus on professional skills and techniques applied for dental professionals.

Breakfast, lunch and dinner will be provided from local restaurants and bakeries with dinner at a restaurant called the Wing's World Buffet. Tea and coffee breaks will be scheduled daily for networking and discussions.

The event will conclude with a closing ceremony summarising key takeaways and celebrating the meeting's success. This ceremony will include a farewell address and unique award presentations.

How will the EDSA meeting in Dublin support the professional development of the dental students?

This meeting features workshops led by dental experts from Ireland and Europe, immersing attendees in the latest advancements in dental technologies, techniques and research. The event provides opportunities for students to network with dental professionals from across Europe. Hands-on training sessions will allow students to apply theoretical knowledge, gain valuable experience and engage with guest speakers for insights into dental practice and research.

Can't wait to see you all in Dublin!

Hosting the EDSA event in Ireland's most prestigious city will ensure that students gain valuable academic insights into the world of dentistry and immerse themselves in the Irish culture and the social experiences, making it a wonderful positive impact both above and beyond the field of dentistry.

From the bottom of our hearts, we look forward to seeing you all at our 76th EDSA general meeting and I promise that you will not be disappointed during your stay here with us!

GLASGOW DENTAL STUDENT ASSOCIATION

LARA MONAGHAN
DENTAL SOCIETY PRESIDENT 2023/2024
UNIVERSITY OF GLASGOW, UNITED KINGDOM

For me, the night before an exam is not for studying. Instead, I watch the same movie every time, Legally Blonde [1]. For those unfamiliar with this 92 minutes of pure motivation, it is about fashion major and sorority president Elle Woods applying to Harvard Law School in an attempt to win back her ex-boyfriend. Her sorority supported her when everyone else thought she was stupid for trying.

Sororities and Fraternities are considered a support experience from across the pond. Are our university societies that different? According to the Higher Times Education [2] - the aims of sororities are that of 'sisterhood, academic achievement, community service and social development'. Our Glasgow Dental Student Society (GDSS) is run by dental students for students with similar aims.

This year I had the privilege of acting as President of the Glasgow Dental Student Society. This is a society of around 300 students studying dentistry and hygiene therapy. Thankfully, we don't all live under one roof but the GDSS brings together a group of students with one interest - Teeth.

College students look to the Greek system to meet friends. After 6 years in the Glasgow Dental Hospital - COVID-19 added an extra year to enjoy - it is obvious how isolating university could have been without fellow dental students. Those university friends undertaking other degrees have long since moved on leaving us still drilling away on Sauchiehall Street. Thankfully, my university experience has been enriched by the friends I have made through GDSS events.

Our annual pantomime was the most rewarding part of my time in the GDSS. Every Christmas for the last 30 years, the final years are required to produce a panto based around dentistry with an emphasis on our experience of clinicians in the dental hospital. Cue some questionable accents, wondrous wigs, a plot derived from "Grease", limited talent and our pantomime 'Teeth!' was born - a teeth whitening experience for all to enjoy which raised £6,000.00 for our chosen charities, The Canmore Trust and Maggie's Cancer Centre.

There are pros and cons for all things so let us not overlook the negatives of sororities. They are known for their exclusivity, initiations during 'Rush' and regular rejections. Our society welcomes any Glasgow Dental Student and for the first year, we also welcomed the dental hygiene students from Glasgow Caledonian University. There is no application, no need to do another UKCAT or interview, and final year "acting" is optional.

I became a more active member of the GDSS in my 3rd year after having heard that the BDA reps were rewarded with a free trip to London - ironically COVID-19 meant 5 out of the 6 meetings I attended were online. On the way home, as I signed up for the wifi in Heathrow Airport, I was asked if this trip was for business or pleasure. While it was my first business trip, it was a pleasure getting involved and meeting students from across the UK. It was the experience gained sitting in on BDSA and GDSS meetings which gave me the confidence to run for President this year.

Glasgow has a strong relationship with the dental societies of Dundee and Newcastle through the organisation of our annual inter-dental field day. This is a sports day which allows socialisation and good-hearted competition combined with the occasional missed bus home! This year also saw Dundee invite us to join in with their 5k run for the Canmore Trust for which, despite being in different cities, we were able to coordinate efforts and raised over £700 for a cause very close to Glasgow Dental School's heart - this Trust was founded by one of our staff members.

Our Dental society has taught me that there is more in dental school than just studying. Burnout is a very common experience in dentists, so I think it is vital to give students opportunities to protect their mental health. Throughout this year a selection of events has allowed us all to make and spend time with new friends outside from the dental hospital and library.

I urge everyone to get involved in their society. Our GDSS could not run without a committee of enthusiastic members. Throughout this year we have learned how to work as a team, balance our time and utilise each other's talents. Without the wit of our panto convenors, the vision of our ball convenors or the creativity of our social secretaries, our events wouldn't have succeeded.

Whilst Elle Wood's reasoning for attending law school was unquestionably flawed, the 4 years spent in her sorority taught her that she could achieve anything she put her mind to. Being part of the GDSS gave me the confidence to speak in front of year groups as well as actively participate in professional meetings with staff and sponsors. It provided an unexpected route to learning life skills that will be utilised throughout my career.

I hope I have convinced you to accept the challenge or at least watch Legally Blonde.

REFERENCES

HUNGARIAN DENTAL STUDENT ASSOCIATION

BY JUDIT TÖRÖK
HUNGARY EDSA DELEGATE
SEMMELWEIS UNIVERSITY, BUDAPEST, HUNGARY

Can you tell us a bit about your background and what inspired you to become the EDSA delegate for Hungary?
I am a 23-year-old dental student from Budapest, who just finished my 4th year at Semmelweis University, also I am the International Relations Officer of our national association. I consider myself a very open and curious person, I've always been interested in other countries and cultures. During my high school studies, I took my time deciding what kind of career I'd like to pursue and as a part of this process, I was admitted to the Milestone Institute in Budapest (which was practically an extracurricular school for Hungarian students who were considering foreign universities to continue their studies at, to help them further explore their academic interests, all in English), where I joined the Model United Nations society, and I have attended numerous MUN student conferences as a delegate. This has become one of my dearest hobbies, but when I decided to study dental medicine, I thought that I have to give it up, because it seemed that it cannot be aligned anyhow with dentistry at all. However, when the opportunity of being the EDSA delegate of Hungary has presented itself to me, I was so happy, that I can continue participating in conferences, debating, representing my country and it's even better since it's not just a game anymore!

What motivated Hungary to join the European Dental Students Association in 2023?
In 2022, there was a major change in the Hungarian Dental Students Association's board, and for the new leaders, it was a highly important matter to re-enter the international dental community (years ago, Hungary was an active member, even an EDSA event was held in Szeged, but then unfortunately we did not meet the expectations in terms of involvement and lost our membership). We want to grant our students the opportunity to gain international experience, challenge themselves both professionally and personally by attending EDSA events, meet colleagues from other European countries and also have fun of course. We hope that we'll get the chance to show our country and rich culture too for example by hosting EVPs and share our professional achievements and experience in professional dialogues at conferences.

Since joining, what has been the most significant impact of EDSA membership on Hungarian dental students?
Many of the Hungarian students are really excited about attending EDSA events, five of us has been to Bucharest for the General Meeting, and we are going to have some Hungarian participants in the Summer Camp in Dubrovnik, a delegation in Strasbourg and many students reach out to me regarding the upcoming EVPs too. We also try to keep up with the international prevention campaigns, our association has organised a running event as a part of the Make Sense Campaign.

What advice would you give to dental students in Hungary who are interested in getting more involved in international organisations like EDSA?
I'd like to encourage everybody to get involved as much as they can, it is a truly amazing opportunity to meet new people from their professional field from all over Europe, do some networking while becoming a part of a really supportive and friendly community, also they can learn from the top European professionals at the lectures and workshops. Being a part of the EDSA family made my student years a lot more interesting and fun and has contributed greatly to both my professional and personal growth, I have already a lot to be thankful for, and I think every student should have this experience EDSA can give.

EUROPE'S LARGEST DENTAL SOCIETY

SUFYAN KHAN
DENTAL SOCIETY PRESIDENT 2023/2024
KING'S COLLEGE LONDON, UK

Established in 1894, catering to the 800 dental students at King's College London.

Society's Aim:
Over our 130-year history, the society has delivered social and academic events to dental students at King's and other UK universities. Our main ethos at DentSoc is to provide our students with a family-like community they can rely on for guidance throughout their time at dental school.

Achievements:
This year, we hosted over 60 events and raised over £40,000 for charity. Our social events ranged from boat parties to bar crawls to graduation balls! These events enabled our students to have something to look forward to during their time at university and a chance to meet and connect with other dental students.

Academic Balance:
We balance our social events with an equal output of academic events. This year, we hosted 13 speakers and 4 hands-on courses, covering endodontics, implant surgery, conservative dentistry, and a range of other topics in the field of dentistry. We strive to cover all bases with our academic events to ensure students at King's are well informed about the specialties and their futures.

Charity Focus:
Charity was a huge focus for the society this year. We hiked Mount Snowdon, organized a bake-off, ran a half marathon, delivered a charity game show hosted by the Singing Dentist, as well as charity raffles at both our halfway and graduation balls. The amount raised is a testament to the drive the entire committee had for such great causes. We had a designated charity representative, Ikjote Kandhola, who was at the forefront of all our charity initiatives this year.

Collaborations:
We collaborated with the BDSA to host the British Dental Students' Association (BDSA) conference at King's this year, which was a huge success thanks to Leena Soltan and the BDSA Local Organising Committee! 800 students across the UK attended and we were able to host 13 amazing speakers and 3 incredible social events.

Key Aspects:
Collaboration is a key aspect of our society as it enables us to hold events that are accessible to more people. Whether it is holding inter-university events or collaborating with sponsors - working together breeds success for everyone. Forming these partnerships has aided the long-term future of DentSoc and will contribute to the growth of this society for years to come.

My Goals as President:
As President, I had three main goals:

- 1) Provide opportunities to dental students at King's and students from other universities.
- 2) Embrace a role I knew would be out of my comfort zone. The role of President required weekly public speaking, leading a committee of 42 people, and delivering events for King's College London dental students. Prior to this role, I was both terrible and terrified of public speaking and leading a team, but I knew tackling this role would help me grow into a person who could help others.
- 3) Ensure the committee loved being part of KCL Dental Society. To see output in anything, you must ensure the people you work with enjoy the process. My greatest achievement this year is the family I made with the committee at this society. Nothing could parallel the joy I felt when I saw any member of my committee say they loved being part of the family this year.

For the upcoming year at KCL Dental Society, the new President Sarah Al-Chalabi takes the helm. There is no better person to take this society to new heights and inspire everyone at King's College London.

CROATIAN DENTAL STUDENTS' ASSOCIATION

KLARA KRIŽAN AND IVA BILOŠ
UNIVERSITY OF ZAGREB, CROATIA

Can you tell us about the Students association of dental medicine and its role within the broader EDSA?

The Students Association of Dental Medicine (Cro. Udruga Studenata Dentalne Medicine - USDM) was founded in 2002 with its seat at the School of Dental Medicine in Zagreb. The Association was founded as a non-profit student association with the aim of improving cooperation between students of dental medicine in Croatia and abroad, in the field of professional education, training and scientific work. The goal of the Association is to gather students by organising educational, scientific, social activities and sports, as well as activities related to the improvement and promotion of the profession and health care of patients. Currently, our Association consists of 14 different projects. Through commitment and participation in various international congresses and the continuous work of individuals to promote international cooperation and student exchange, we became a full member of the European Dental Students' Association (EDSA). Two of our projects are directly connected with the EDSA: European Visiting Programme Zagreb and Summer Camp Dubrovnik. Besides that in 2008 and 2022, our Association had the honour of hosting the in-person EDSA General Meeting.

How did you both become involved with the EDSA and what motivated you to take on leadership roles within your local association?

Klara: I first found out about EDSA during the first year of my studies and immediately became intrigued by its Projects and the possibilities it offered. I decided to attend the 68th EDSA Meeting in Košice to learn more about it. I became particularly interested in EDSA's Mobility Projects, so I got involved in the organisation of EVP Zagreb and EDSA Summer Camp Dubrovnik. I also had the chance to organise the 69th EDSA Meeting in Zagreb, which was an experience that made me realize how much I liked being involved in EDSA activities. Finding out about the structure and the work of EDSA and other Local and National Associations, inspired me to join the Executive Committee of the USDM. I wanted to improve the USDM, involve more students in its projects and familiarize them with the different opportunities the Association offers.

Iva: I started to be involved in the EDSA in my first year, becoming a member of the Local Organizing Committee of EDSA Summer Camp Dubrovnik. Since then, I've come to appreciate just how many possibilities EDSA has given me, which is one of the reasons I attended the 72nd EDSA General Meeting in Liverpool. Following that, I applied for the position of Co-lead of EDSA Magazine, where I have been working on the Spring and Summer issues. By my third year, I began to see that I could enjoy spending my free time on things I am passionate about and, together with my colleagues, might improve the work of our Association. I joined the Student Council and became Vice-President of the Association last year. Now, I will continue my work as the President of the USDM.

What are some of the main goals and objectives of the Students Association of Dental Medicine in terms of promoting international cooperation and exchange within the field of dentistry?

Looking back on our Association's many years of work, we can confidently declare that an increasing number of students are getting involved in international activities each year. The involvement and hard work of students who represented Croatia within the EDSA board continuously serve as an inspiration for younger students to get involved as well. One of our main goals is to enable Croatian students to participate in a greater number of international activities and events, through which they can improve their knowledge and skills in the field of dentistry. Besides that, we are trying to familiarise our colleagues with our international activities early on in their studies, in order to ensure they continue the legacy of the previously involved students. We want to continue to enable everyone to enrich their student days by broadening their horizons and getting to know their colleagues from different countries within Europe.

Looking ahead, what are your aspirations for the future of the Students Association of Dental Medicine within the EDSA network, and how do you envision further enhancing collaboration and exchange opportunities?

In the near future, we hope to involve even more students in the activities of our Association and inspire them to continue carrying on the Association's tradition. Since our University offers a study programme in English in addition to its Croatian study program, one of the Association's most recent goals has been to involve students from all over the world in the activities we offer. We are quite proud of the fact that we are successful in this regard. We plan on continuing with the organisation of Mobility Projects organised in collaboration with EDSA and promoting the Projects of the same kind to our colleagues.

ORGANISING A NATIONAL EVENT DURING DENTAL SCHOOL

DAYYAN ALI
BDSA SPORTS DAY ORGANISER
UNIVERSITY OF BIRMINGHAM, UNITED KINGDOM

As a fourth year dental student I've always been informed by senior students that this year at Birmingham is the hardest of the degree, because we have the most difficult exam as well as the most patient contact. I thought my sole focus would be on academics, that was of course until I was presented with the opportunity to organise the British Dental Student Association's (BDSA) Sports Day.

What is the BDSA Sports Day?

The BDSA Sports Day is an annual event where all 16 dental schools in the United Kingdom take part in competitive sports in order to win the coveted BDSA Trophy! After a full day of playing sports we usually go out for socials.

Alongside my organising committee I was able to host over 600 UK dental students for two days of sports and socials. We were able to utilise the world class sports facilities at the University of Birmingham campus and host two great parties. We had sports such as football, basketball, netball and touch rugby with almost every university sporting a team.

What difficulties did you experience?

When taking on the role I knew it would take time and commitment from myself. But at first perhaps I underestimated how much. Countless emails and phone calls, late meetings to sort out any issues, and working overtime in the build up and during the weekend to ensure it went well. During the exam period I felt I focused more on the event than my exams. Thankfully I was still able to manage my time well enough for the event to be a success and to pass my exams.

What were your main highlights?
Back in high school I used to take charge and lead activities all the time, this was something that I had lost touch with whilst studying dentistry. However, with the opportunity to organise the sports day I was able to feel like a leader again. I remembered how I enjoyed holding responsibility and how it made me strive to be better and work harder.

When organising an event of this scale you have to work with a plethora of companies, both dental and non dental. Not only do I have more insight into what these companies do, I've managed to make new contacts and professional relationships that may help me in future. I love meeting new people and making friends, so this opportunity has allowed me to make new friends that I otherwise would never have met.

The event itself was probably the biggest highlight! 9 months of hard work, planning, endless phone calls, long meetings and worrying about suppliers all came together perfectly on the day. The timings were smooth, the committee made sure everything worked really well and lastly the participants really enjoyed it. The sense of pride and accomplishment, in my committee as well as myself, was something that was worth all of the hard work over the year.

What advice would you give for organising events?
If you ever find yourself organising an event similar to this these are a few things that helped me immensely.

A good committee makes your life so much easier, so be meticulous with who you appoint into the roles. Thankfully my committee were willing and happy to work as hard as me if not harder in their respective roles. Knowing that I could delegate tasks and that they would still be done to a high standard brought me peace of mind. I only have the highest praise for each member of the committee as without them sports day would not have been as good as it was.

The quote 'If you fail to plan, you plan to fail' never resonated with me as much as it did whilst organising this event. I was in an unfamiliar position taking charge of a massive event, worrying over every minor detail. Thankfully, planning not only the event but the tasks that needed doing from the very beginning allowed me to ensure that sports day went as I wanted it to go. Even thinking ahead and planning time in case something went wrong allowed us to sort out issues before they had an impact. A good plan leads to a great event.

Enjoy it! It can be difficult to have fun or enjoy the role in the high pressure environment. But looking back at it I had so much fun; working with my committee, coming up with ideas, working with all of the different companies and during the actual event itself. This experience has been something I'll remember for many years to come.

AI IN DENTISTRY

BY BOGOMIL SABEV
UNIVERSITY OF ZURICH, SWITZERLAND

Since EDSA is not only exchange platformfor dental students but also a think tank for the future generation of dentists, we will inevitably confront questions about both current issues and long-term trends. It is fascinating to observe how different educational and health systems across Europe address these trends. In this article, I aim to concisely comment on current trends in dentistry and how they might influence the future of dental education. Will AI make our job redundant?

To begin with, I want to cite a study by Prof. Dr. Thomas Marthaler, a pioneer in the Swiss prevention campaign, published in 2005. He demonstrated that prevention campaigns, particularly the introduction of fluoridated toothpaste, reduced the DMFT index (number of decayed, missing, or filled teeth) by 88.4% among 15-year-olds in the Canton of Zurich1. This trend is not just a statistic in a study; it is evident in our daily work. The consequence: sooner or later, the entire Swiss population will benefit from good and early fluoride prevention and dental care. While this doesn't mean that caries will disappear completely, it will be significantly reduced. What will remain? Hypothetically, cases of trauma, geriatric patients who neglect oral hygiene due to dementia or who come from a time before generalized prevention, TMJ disorders, syndromes, and other complex conditions. In summary, we won't be out of work, but the cases we handle might become more complex and more "medical."

Some might think that this, combined with AI tools, will eliminate our jobs. It won't eliminate them; it will change them. However, the basic education will remain the same. Take, for example, an AI that detects caries on an X-ray image. The AI might be correct in 99.99% of cases, but we must be able to identify the 0.01% of mistakes. And this is a simple task. The AI won't drill the tooth, talk to the patient, or perform surgery—at least not in the near future. So, how can we approach this development, and where does our education stand today?

If I had the opportunity to revise the curriculum, it would focus on five key topics: general medicine, holistic approaches and treatments in dentistry, optimisation of prevention and minimally invasive interventions, patient management in the era of AI, and improved early diagnostics, possibly including salivary diagnostics for general health conditions. Some of these points are also mentioned by the EDSA-ADEE working group, in some research papers and in terms of accessibility and sustainability also in the "Vision 2030" of the FDI 3,4,5.

The first three points are already part of dental education or are being enhanced. In Switzerland, our curriculum includes extensive lectures on general medicine, surgery, psychology, psychiatry, and interdisciplinary subjects such as geriatric dentistry and orofacial pain and so on. Towards the end of our studies, we have synoptical courses where we treat patients holistically 2. This includes collaborating with general practitioners to adjust medications, planning and executing treatments that consider overall health conditions. Although we don't place implants ourselves, as students, we must plan them in a holistic treatment plan and justify our decisions at every step.

Exactly this will be the challenge for dental education: we must learn and teach diagnostic and planning skills at a level that allows us to supervise an almost perfect AI while the number of easy-to-treat patients decreases, limiting opportunities to practice basic skills.
On the other hand, educational tools are rapidly improving. X-ray diagnostics can be trained with learning software, access to scientific content has never been easier, and there are even virtual haptic simulators where we can practice a variety of scenarios, including cases from our own patients through intraoral scans.

Will AI make our job unnecessary? If we learn and train how to use it, no. But it will change our profession significantly. We, as human experts, will provide the personal aspect of treatment, considering and treating the patient as a whole. For most people, we will become oral health coaches, which means we must pay even more attention to the medical aspects of dentistry while maintaining excellent clinical skills 4.

At this point, I encourage you to embrace the upcoming technology. Simultaneously, we as an organization and as students need to demand and promote strong manual and theoretical foundations. Ultimately, we are all human beings: we, as dentists, excel in interpersonal contact more than computers do, and our patients are more than just their dental hard tissues.

REFERENCES

THE GRADUATING EUROPEAN DENTIST

BY JOSHUA KENNEDY [1] , JAMES FIELD [2]

[1] Academic Dental Foundation Trainee, Newcastle University School of Dental Sciences and EDSA Vice President of Public Relations
[2] Professor of Dental Education and Restorative Dentistry (Cardiff University) and GED Taskforce Chair (ADEE)

Background

In the EU, the training of dentists is governed by the European Directive on the Recognition of Professional Qualifications (1). This directive sets out fundamental guidelines concerning the duration and nature of dental education, aiming to maintain a minimum standard of training across member countries. However, it grants significant flexibility to dental educators, who decide the specific curriculum and method of teaching at the national or local level. As a result, dental students encounter diverse and discrepant educational approaches throughout Europe.

The Association for Dental Education in Europe (ADEE) plays a crucial role in addressing this problem. As a large network of dental educators from across Europe, ADEE has been actively involved in efforts to harmonise Oral Health Professional (OHP) education (2). Through its taskforces, annual meetings, and special interest groups, ADEE facilitates the exchange of ideas and best practices among educators, aiming to enhance the quality and consistency of dental education.

The Graduating European Dentist curriculum

ADEE has made a substantial impact on this initiative by creating the Graduating European Dentist (GED) curriculum, which was released in 2017 (3). Developed by an international task force and through extensive consultation, this curriculum offers guidelines for optimal academic practices in dental education. The GED curriculum provides a standardised and aspirational learning-outcomes-based curriculum for graduating dentists, thereby advancing excellence in dental care throughout Europe (4).

The mutual recognition of qualifications within the EU further underscores the importance of a harmonised curriculum. As students and OHP professionals move across borders, they bring with them different experiences and skill sets, enriching the professional landscape but also posing challenges for standardisation and mutual understanding (2). An open curriculum, which allows for greater flexibility and exploration of various educational pathways, can help accommodate these diverse backgrounds (2).
Moreover, the EU-funded collaborative Erasmus+ project, 'O-Health-Edu,' aimed to further understand and improve the state of OHP education in Europe. This project sought to develop a common vision for OHP education reaching until 2030, supporting changes that will better position the profession to meet the oral health needs of the European population (2).

The GED curriculum is structured into five domains (5, 6):

1. Professionalism
2. Safe and Effective Clinical Practice
3. Patient-Centred Care
4. Dentistry and Society
5. Research

Environmental sustainability

Sustainability is a cornerstone of each of the 5 GED domains (4, 7). Currently, oral healthcare is not considered environmentally sustainable, being a significant contributor to global greenhouse gas emissions, production of other pollutants, and generation of non-recyclable waste (8).

In response to the environmental impact of the healthcare sector at large, numerous national and international stakeholders have developed policy documents addressing the climate emergency (9). Notable examples include the Paris Agreement, the United Nations Sustainable Development Goals (SDGs), WHO COP reports, and NHS England's "Delivering a 'Net Zero' National Health Service" policy (9). These documents highlight the critical need for systemic changes to mitigate environmental damage and promote sustainability across healthcare services.

More recently, the dental profession has seen the emergence of specific policy documents aimed at promoting environmentally sustainable practices within oral healthcare. One such document is the Joint Stakeholder Statement for Consensus on Environmentally Sustainable Oral Healthcare. This statement, supported by the FDI World Dental Federation, underscores the importance of collaboration among all stakeholders to enhance sustainability. It advocates for the integration of SDGs into everyday dental practice and endorses a transition towards a green economy. Achieving these objectives necessitates the formal incorporation of Environmental Sustainability (ES) into the curricula for OHPs (10).

In 2019, the ADEE highlighted the urgency of this integration during its annual meeting. A Special Interest Group (SIG) reached a consensus on the critical role of ES in dental education and emphasised the need for academic support in developing relevant curricula. This group identified a significant demand for teaching materials and guidance to assist educators and curriculum developers in embedding ES principles within dental training programs (9).
The commitment to sustainable practice is not only a professional obligation but also an essential step towards ensuring the long-term viability of the oral healthcare sector and its contribution to global environmental sustainability.

Research within the curriculum
Scientific progress and research in dentistry play a crucial role in enhancing patient care. Integrating research into the education of OHPs is especially important as it equips future clinicians to apply evidence-based practices. In today's era of advancing clinical complexity and informed patients, evidence-based care has become the universally recognised benchmark in healthcare delivery. Therefore, incorporating research training into dental education curricula is essential to cultivate skilled and well-informed dental professionals (11-13).

OHP institutions have shown a variety of methods for integrating research into their curricula. These approaches encompass student research clubs, required theses, research projects, and specialised courses/electives centred on research methodologies. These initiatives aim to cultivate a focus on research among dental students, providing them with the essential skills to critically appraise and utilise scientific evidence in their clinical work. Through these educational strategies, upcoming dentists are effectively prepared to embrace and promote evidence-based practices throughout their professional journeys (13-15).

Dental students have shown a strong interest in integrating research into their curricula, as evidenced by various studies. For example, a survey of US dental students demonstrated overwhelmingly positive attitudes toward including research in dental education.16 This favourable reception is not limited to dentistry but extends to medical education, where research training is widely recognised as crucial. Medical students perceive research education as essential to their professional development (17).

Recently, the ADEE conducted an open consultation regarding a new domain in the GED Curriculum—Domain 5: Research. This consultation offered a chance for individuals, institutions, societies, organisations, regulators, and industry partners to participate in the curriculum development process. Participants were encouraged to give input on the suggested learning objectives, emphasising their clarity, significance, and level of challenge. This inclusive method aims to ensure that the curriculum incorporates a wide range of viewpoints and effectively serves the dental education community's requirements (18).

The learning objectives for Domain 5 have been crafted over the last 18 months with input from various stakeholders, including GED taskforce members, ADEE special interest group members, students and educators from Europe and South America, and presidents of IADR (past, current, and elect). The development process was also informed by research conducted by the EDSA. (19) This collaborative endeavour aims to establish a comprehensive and up-to-date curriculum that meets the highest educational and professional benchmarks, ultimately improving the standards of dental education and patient care.

Next steps

In the upcoming months, ADEE will commence a new project in collaboration with EDSA. Given the challenges posed by information overload and the widespread influence of social media, ADEE and EDSA recognise the pressing need for students to enhance their information literacy skills. Recent observations by educators have revealed a concerning decline in these skills, particularly in areas such as evaluating information, effective communication, and proper source attribution. With the growing impact of artificial intelligence on education, it is essential for students to maintain academic integrity by accurately acknowledging their sources. This research project aims to explore the levels of trust that students place in different sources of information provided to them.

As we progress, it is crucial to create settings that encourage critical thinking and ethical behaviour in research and academic pursuits. By providing students with strong information literacy skills, ADEE and EDSA aim to enhance OHPs' capabilities, supporting their academic achievements and meaningful contributions to their fields.

REFERENCES

BDSA RESEARCH SUMMIT

ALIYSHA RAHMAN
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A little bit about me ...

3 years ago, I moved 190 miles away from home to the University of Leeds to start my journey as a dental student, equipped with too many clothes and the advice from my dad to work hard, stay focused and eat almonds before exam day... I felt like I was ready, with my freshly ironed scrubs and pastel STABILO highlighters in hand I had just sold my academic soul to my A-levels throughout my gap year, burnt out but excited I felt ready for dental school, I told myself university couldn't be that much more difficult, but I was wrong... I very soon after came to realise balancing dental school, having a life outside of it and being so far away from home becomes taxing. I took any opportunities that I could to get involved in the wider dental community. I had a special interest in supporting inclusivity within the dental school, in both DCT and DHDT students - like me who were struggling to find a balance in university life, this led me to become a representative for a University of Leeds initiative – 'Better Me, Better You, Better Us', which has a focus on supporting students in coping with imposter syndrome and bridges the gap between Dental Surgery and Dental Hygiene/ Dental Therapy students. I also had a keen research interest, which aided my role as BDSA's Academic Officer. It took me till this point to understand how to balance dental school and life away from home, and don't get me wrong I am still learning but this is my insight!

How did I get involved in the BDSA?

I had heard about the infamous events of the BDSA long before I came to dental school. After having a conversation with past President Joshua Kennedy at the Leeds BDSA Sports Day, where I was a Sponsorship Representative, I soon came to realise the academic side of it and how beneficial and fun being involved could be. One day when scrolling on Instagram, I saw new roles being announced to join the BDSA committee, one of them being the Academic Officer, with my interest in research and passion for promoting cohesion and community across dental schools, this seemed like the perfect role for me! My application was successful, and I was very excited to bring my ideas to life. Given that the Research Summit had not happened for the past couple of years, I was given a blank canvas to create an event in my vision.

What were my main responsibilities in this position?

I had the opportunity of organising this coveted event, with the help of my amazing subcommittee. My aim with the Research Summit was to empower students with the chance to connect with the wider dental community beyond dental school. All students submitted work in abstract form, we had a range of broad dental-related submissions, ranging from 'Decolonising the Dental Curriculum' to 'The interplay between Islam and Oral Healthcare'. I am also proud to say that this year's Research Summit saw increased submissions, over triple that of the last Summit! Additionally, we saw engagement from all 5 years, from various Dental Schools across the UK, making it a successful collaboration of the current upcoming generation of young dentists. In terms of prizes, the first-placed student was published in our national student journal and provided the opportunity to partake in the Peniche iTOP Surf Camp this August. (sponsored by Curaden UK). The highly commended student received an exclusive Curaden Goodie bag valued at over £100 and a personal invitation to a UK iTOP Introductory course at their new office in Northampton!

How did you balance your academic studies with your role in the BDSA and any other extracurricular activities?

For this question there is no right answer, I am still learning and finding the ropes of dental school, but so far my tips to balancing university would be to have a life outside of dentistry – completely separate and nothing to do with teeth! For me, outside of dental school, I love cooking and going to the gym! I am currently training for Hyrox doubles which gives me goals outside of university and keeps my physical and mental health in check. I also can't stress enough the power of having a good support network around you. I am extremely grateful to have found such an amazing group of friends, some of which also do dentistry which aids in relatability and comfort around the stresses that come with dental school.

Can you share any advice or tips for other dental students?

My biggest tip would be to stay open-minded, be proactive and take every opportunity that comes your way. Actively look for ways to engage and meet new people inside and outside of dental school, attend talks where your busy clinic schedule permits, go to conferences and workshops, network and build connections with peers and professionals in the field. I think it is also important to stay committed and persevere through the waves of burnout that may follow an exam season. Dental school is a high-stress environment, but having gotten this far I think it is always important to commend ourselves on our current achievements and be present in the moments as they come!

What are your long-term goals within the field of dentistry, and how do you see your involvement with the BDSA contributing to achieving those goals?

As I am only in 3rd year of dental school I want to be open-minded. I am taking every opportunity that comes and going to workshops arranged by my DentSoc. For example, recently there was an anterior composite workshop organised which gave me an insight into restorative dentistry. I later attended a conference with endodontists, periodontists and oral surgeons all of which captured my interest ... At this point, I am interested in every speciality that I have been exposed to, one week I want to do Oral Surgery, the next I am ready to embark on my Endodontic career!

So for right now instead of changing specialities every week I am staying open-minded to everything. I also enjoy connecting with not only dental professionals but with individuals in various fields that interest me such as that of physical and mental well-being, economics, and business.

The BDSA helped me to connect with other dental students across the UK, network with professionals in the field as well as meet people who will not only be future colleagues but individuals who I hope to have as future friends for life.

EXPLORING THE CONNECTION BETWEEN DENTAL STUDENTS' PSYCHO-EMOTIONAL STATE AND ORAL HEALTH CARE

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Introduction

A variety of international and international studies have demonstrated that healthcare providers working in the dentistry field are particularly prone to mental health problems in their daily lives. We, as dental students, are constantly exposed to a highly demanding environment, including keeping up with the high standards of our education and a highly competitive environment that usually has negative consequences regarding our psycho-emotional state 1. Daily, we keep reminding our patients about the importance of optimal oral health. However, sometimes we forget to think about ourselves whilst experiencing high levels of stress, depression and anxiety that potentially influence our oral care habits. At this moment, I, Saulė Skinkytė, a fourth-year dental student from Vilnius University, Lithuania, am conducting a study to explore the associations between dental students' psycho-emotional state and oral health care practices.

Why Is This Study Important?

In 2023, FDI (French: Fédération Dentaire Internationale) World Dental Federation released a policy statement on raising mental health awareness in the dental community 2. The data gathered from this study will help to understand the link between mental health and oral health of dental students studying in the WHO (abbr. World Health Organisation) European Region and, in the long run, develop efficient strategies to cope with stressors in the academic environment.

Understanding the connection between mental health and oral health is essential for several reasons:

1. **Improved Patient Care:** By being aware of how to manage your health properly, you can provide better education and service for the community.
2. **Better Well-Being and Academic Performance**: By identifying stressors and their impact on oral health, we can develop strategies to enhance your overall well-being as a healthy mind and body contribute to better academic performance and clinical skills.
3. **Ending the Stigma of Mental Health**: A proactive approach in recognizing the psychological struggles and active implementation of dealing strategies would normalize talking about mental health in the workplace context.

What Will You Gain from Participating?

Participating in this study offers several benefits:

1. **Self-Awareness**: Reflect on your own mental health and oral hygiene practices.
2. **Supportive Resources**: Gain access to resources and recommendations to improve your mental and oral health.
3. **Contribution to Research**: Help advance understanding of the interplay between mental health and oral hygiene, benefiting current and future dental students.

What Will the Study Involve?

The study involves answering questions to assess your psycho-emotional state and oral health care habits. The survey will cover areas such as:

- **Stress Levels**: Assessing how often you feel stressed or anxious.
- **Anxiety and Depression levels**: Evaluating the frequency and intensity of feelings such as sadness, hopelessness, and a lack of interest in activities you once enjoyed.
- **Oral Hygiene Practices**: Evaluating how consistently you maintain your oral hygiene routine.

Confidentiality and Anonymity
Your participation is entirely voluntary and anonymous. All responses will be kept confidential and used solely for research purposes. No identifying information will be collected, ensuring your privacy is maintained.

Call to Action
We invite you to take part in this critical study. Your insights and experiences are invaluable in helping us understand the relationship between mental health and oral health among dental students. By participating, you contribute to a body of research that aims to improve the quality of life for yourself and your peers.

How to Participate
To participate, please scan the QR provided to complete the survey. It should take approximately 7 minutes to complete. Your honesty and thoroughness in responding to the questions are crucial for the study's accuracy and reliability.

Thank you for your time and contribution to this significant research. Together, we can work towards a healthier, more balanced life for all dental students.

For any questions or additional information, do not hesitate to get in touch with Saulė Skinkytė at skinkyte.saule@gmail.com

Your participation is greatly appreciated!

SCAN THE QR CODE

TO CONTRIBUTE

REFERENCES

BIOMIMETIC HYDROXYAPATITE IN CARIES PREVENTION

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The Rising Demand for Fluoride-Free Products

Tooth decay is the most common non-infectious chronic disease worldwide, it has a significant impact on public health costs and everyone's quality of life. Fluorides have the main role in preventing dental caries and are used therapeutically to repair demineralizing caries lesions. [1] Even though fluoride is one of the most effective preventive measures against dental caries, its excessive use can lead to a potential risk of developing dental fluorosis in children under the age of six years. [2] Consequently, the public stigma regarding the systemic effects of fluoride, combined with the risk of allergies and fluorosis, has led to an increased demand for oral hygiene products that are not a source of fluoride.

What is a Biomimetic Hydroxyapatite?

With the rise of biomimetic dentistry, there is now a large body of literature on biomimetic hydroxyapatites (BHAP). Biomimetic means that the synthesised material has chemical and physical properties similar to the human body. These calcium phosphate crystals have been extensively studied and their biocompatibility (biomimetics) with human hard tissues has been established. [3] BHAPs have been successfully used as active minerals to promote better bone healing and implant placement. Their incorporation in toothpaste has proved to be a valuable tool for averting dental caries in primary dentition by protecting against the risk of fluorosis. [1]

Where are Hydroxyapatites Derived From?

In 1993 Basle published detailed research on the effect of synthetic and natural hydroxyapatite (HAP) derived from bovine bone on the cellular reactions of rabbit bone. The trend towards synthesising BHAP from natural sources remains the most popular method. Not only bovine bones are used, but also fish bones, scales and shells. [4] Natural traces of zinc, sodium, magnesium and carbonates in BHAPs extracted from natural sources can replicate the apatite structure. These ions improve the physical properties of HAP such as thermal and crystalline stability, morphology and solubility. HAP of natural origin is considered a more environmentally friendly, sustainable and cost-effective substitute than synthetic BHAP. However, using HAP of natural origin in daily oral care products has not been extensively studied. [5]

Is BHAP Better than Fluorides?

In 2021, a study by Limeback H. and co-authors published a systematic literature analysis on the association of BHAP with caries prevention. Based on the researchers' findings, in vitro studies have shown that BHAP interacts favourably with tooth surfaces, suggesting that BHAP may be an effective caries preventive agent. BHAP has been found to provide additional calcium and phosphate to saliva and biofilm, thereby improving the remineralization process. [1] Therefore, the mechanism of action analysis suggests that BHAPs have a different effect than fluorides, but are undoubtedly no less effective in preventing dental caries in deciduous and permanent dentition.

Benefits in Patients with Dentin Hypersensitivity

Also in 2023, Limeback H. and co-authors published another study reviewing the use of BHAP to reduce dentin hypersensitivity. As dentin sensitivity and pain profile are closely related to the symptoms caused by carious lesions [6], BHAPs have been found to have not only anti-caries properties but also to be suitable for use in the reduction of dentin hypersensitivity. In vitro experiments have shown that BHAP in toothpaste and other oral care products attaches to the open dentin surface, coats it with microscopic apatite particles and occludes the open dentin tubules. [7] Therefore, BHAP is suitable for reducing dentin hypersensitivity and routine prophylaxis as it can reduce the flow of dentinal tubular fluid and block the nerve pain signals from the odontoblast to the brain.

Effects on Composite Resin Restorations

The efficacy of BHAP against secondary caries has also been demonstrated at the microscopic level through scanning electron microscope/energy dispersive spectrometer (SEM/EDS) studies. In 2021, Italian researchers published the results of an analysis to assess the deposition of zinc carbonate BHAP on polymer composite resin using SEM/EDS analysis. Based on the results, it is concluded that mineral-enriched BHAP toothpaste could be recommended as an oral hygiene product for patients with composite resin restorations. [8] In addition to the demonstrated remineralizing effect on tooth enamel, zinc phosphate BHAP has an effective mineral deposition on the surface of the polymer composite resin, a liable lesion-sealing efficacy.

The Potential of BHAP-Enriched Mouthwashes

BHAP mouthwashes are similar to chlorhexidine in reducing bacterial adhesion to the enamel surface. In vitro studies have revealed that zinc carbonate BHAP inhibits the biofilm formation of *Streptococcus Mutans*. However, BHAP had one disadvantage, rinses with BHAP could not kill the bacteria in the biofilm compared to other bactericides such as chlorhexidine. [9] It can be argued that BHAP has the advantage of preserving the normal oral flora and increasing the mineral content of the tooth surface to prevent colonisation by pathogenic bacteria, though independently BHAP rinses should not be used for rinsing when the primary goal is to achieve a bactericidal effect.

Conclusion

Firstly, the increasing demand for fluoride-free oral hygiene products makes BHAP a suitable alternative for children at risk of fluorosis and adults. These apatites are biocompatible with human tissues and have no potential systemic toxic effects. Secondly, recent scientific studies have shown that using toothpaste with BHAP is effective against the development of caries. Although it does not have a bactericidal effect, it reduces the colonisation of pathogenic bacteria. In conclusion, based on the information from research and publications, a recurring message emerges that although there is an increasing amount of information on the benefits of mineral-enriched BHAP for our dental health, much more research is needed to highlight the importance and facilitate the incorporation of BHAP into routine oral hygiene products.

REFERENCES

COMPLICATIONS OF DIABETES MELLITUS IN PERIODONTITIS AND IMPLANTS

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Introduction

Diabetes mellitus and periodontal disease are among the most common chronic diseases and, remarkably, they share many common features. The most common forms of periodontal diseases, gingivitis and periodontitis, are characterised by a microbially driven series of host responses that lead to periodontal tissue damage. The host response is central to the development of periodontitis, as it is to the development and progression of several human chronic diseases, including diabetes mellitus. (1) Periodontitis is common in many countries, in advanced cases, leads to tooth loss and reduced quality of life. The aetiology of periodontitis is multifactorial. (2)

Diabetes Mellitus

Diabetes is a chronic metabolic disorder characterised by high blood glucose levels that result from absolute or relative insulin deficiency, in the context of beta-cell dysfunction, insulin resistance, or both. (3) In this context, it is essential to acknowledge the presence of two distinct forms. The disease manifests distinct differences in its physiopathology, clinical presentation, and progression. Its two prevalent forms are:

- Type 1 diabetes, previously called "insulin-dependent diabetes" which accounts for 5%-10% of diabetes and is due to autoimmune beta-cell destruction, usually leading to absolute insulin deficiency.
- Type 2 diabetes, referred to as "non-insulin-dependent diabetes" which accounts for 90%-95% of all diabetic cases. The pathophysiologic defects include beta-cell failure and insulin resistance in the liver. (1)

Gingivitis vs Periodontitis

The continued build-up of supra- and subgingival polymicrobial biofilm communities triggers a persistent immune response within the periodontium. This inflammatory process can be reversed by removing the microbial biofilm, thereby limiting inflammation to involvement of the gingival epithelium and connective tissues. However, if biofilm accumulation persists and leads to deeper involvement of periodontal tissues, such as the deepening of the gingival crevice, then the result will be destruction of periodontal ligament (PDL) and alveolar bone loss. This inflammatory process is irreversible and defines periodontitis.

Periodontitis is a chronic multifactorial disease associated with the accumulation of dental plaque and as mentioned above is characterised by progressive destruction of the teeth supporting apparatus, including the PDL and alveolar bone. (2)

Diabetes Mellitus and Periodontal Disease - A Bidirectional Relationship

The association between diabetes mellitus and periodontal disease was proposed more than half a century ago. (1) Since then, extensive research has been conducted and numerous studies across diverse populations worldwide have reported on this association. The substantial body of evidence has led to the proposition of recognizing periodontitis as the "6th complication of diabetes mellitus". (1)

In this context, studies that have illustrated diabetes mellitus, in its two most common forms, type 1 diabetes and type 2 diabetes, have been associated with a higher prevalence of periodontal pathology than that of the general population.

Studies have also shown the evidence that young individuals with type 1 diabetes, especially those with poor metabolic control as assessed by glycated haemoglobin levels, exhibit poorer periodontal conditions than healthy individuals. Older type 1 diabetes patients seem to be suffering with periodontitis more than healthy subjects or type 2 diabetes subjects, although this could partially be explained by their longer exposure to diabetic pathology. It was concluded that there is a significantly higher prevalence and severity of periodontitis in type 2 diabetes and (young) type 1 diabetes patients than in healthy controls. (1)

Regarding long-term periodontal health stability, uncontrolled diabetes may affect the success of periodontal treatment and the risk of periodontal disease progression and recurrence. In a long-term study assessing the presence of periodontitis and its treatment response in two groups of young adults, one with type 1 diabetes and one healthy control group, it was found that type 1 diabetes patients with poor metabolic control also presented increased periodontitis recurrence, as indicated by increasing probing pocket depths compared with the control group. (1)

Peri-implant complications in diabetes

Diseases around dental implants are infections that can range from inflammation of the gum around the implant (called peri-implant mucositis) to a more severe condition called peri-implantitis, which also affects the bone supporting the implant. Peri-implantitis is defined by presence of bleeding on probing and/or suppuration, increasing probing depth compared with previous examinations, and presence of bone loss beyond crestal bone level changes resulting from initial bone remodelling. (1)

If there isn't any previous examination data, it is important to take note of bleeding and/or discharge during a gentle probing (with depths of 6mm or more) and bone levels of at least 3mm (measured from the apex to the most coronal part of the intraosseous section of the implant). Although, patients with previous periodontal disease have been shown to have an increased risk of peri-implantitis compared with patients with no previous history of periodontitis.

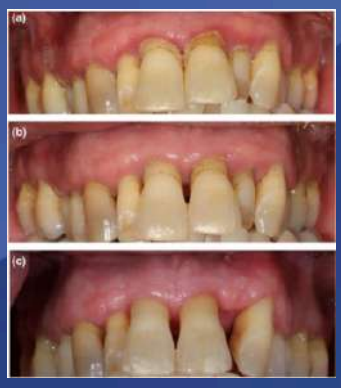
In rat models and humans, inadequate management of diabetes has adverse effects on implant osseointegration. Conversely, diabetic individuals maintaining optimal serum glycaemic control appear to experience successful osseointegration. Supporting this idea, a recent review indicated that individuals with poorly controlled diabetes, as opposed to those with well-controlled diabetes, face challenges such as impaired osseointegration, an increased risk of peri-implantitis, and lower rates of implant success. (2)

It is important to assess the condition of the tooth before proceeding with implant placement, in order to determine if it is truly necessary. One of the most crucial characteristics is the vitality of the tooth and the level of mobility present. It is also essential to be as conservative as possible because the implant placement is always the final resort and can be complicated, especially in cases of patients with systemic diseases. (2)

The importance of effective home care practices

For patients, and particularly those with Diabetes Mellitus, establishing effective home care practices is key to preventing periodontal disease, ensuring successful periodontal therapy, and preserving long-term dental health. Dentists should emphasise the importance of diligently removing dental biofilm at home especially before undergoing active periodontal therapy. This message of consistent and thorough at-home care is crucial and should be reinforced regularly, both during the initial phases of periodontal treatment and throughout subsequent follow-ups. This holds true for all patients, with special attention to those managing diabetes mellitus. (2)

1. Initial
2. After 9 weeks of home care
3. Periodontal re-evaluation post-6 weeks therapy (3)



Conclusion

To conclude, the intricate relationship between diabetes mellitus and periodontal disease is well-established, with both conditions sharing common features and contributing to each other's progression. The bidirectional association between diabetes mellitus and periodontal disease has been extensively studied, leading to the recognition of periodontitis as a potential complication of diabetes mellitus. This emphasises the importance of considering both the form and control of diabetes in understanding the impact on periodontal health. Moreover, the influence of diabetes on peri-implant complications is a critical aspect to consider in dental implant procedures. Inadequate management of diabetes poses risks to implant osseointegration, while optimal glycaemic control enhances the chances of successful outcomes. The collaboration between healthcare providers and patients, along with a comprehensive understanding of the bidirectional relationship between diabetes mellitus and periodontal disease, is essential for successful prevention, treatment, and long-term dental health.

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EARLY TREATMENT IN CLASS II ORTHODONTIC PATIENTS

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Class II malocclusions pose significant challenges in orthodontic practice, affecting a considerable proportion of children worldwide. [1] The debate over the timing and approach to treatment, particularly in Class II division I cases, underscores the complexity of orthodontic management and the diverse perspectives within the field.[1, 2] This article explores the efficacy, benefits and considerations associated with two-phase treatment during the mixed dentition compared to single comprehensive therapy in adolescence, shedding light on the considerations involved in clinical decision.

Rationale for Early Orthodontic Treatment:

Early orthodontic treatment, also known as interceptive or "Phase I" treatment, involves initiating orthodontic intervention during the mixed dentition stage, typically between the ages of 7 to 11 years.[2] The rationale behind early treatment lies in its ability to capitalize on the dynamic growth potential of the craniofacial complex, thereby correcting to develop malocclusions more effectively and efficiently [2,3].

One of the primary objectives of early orthodontic treatment is to intercept and correct skeletal discrepancies, particularly in Class II division I malocclusions, where there is an abnormal relationship between the upper and lower jaws.[4] By addressing these skeletal discrepancies early on, clinicians aim to guide facial growth and development towards a more harmonious and balanced profile [2, 4].

Moreover, early intervention allows clinicians to mitigate the progression of malocclusions, thereby reducing the severity of orthodontic issues that may manifest later in adolescence.[2] For example, intercepting Class II division I malocclusions during the mixed dentition stage can prevent further exacerbation of overjet and overbite, minimiszing the need for extensive orthodontic treatment in the future.[1, 2]

Two prevailing treatment approaches for Class II division I malocclusions are examined: two-phase treatment during the mixed dentition and single comprehensive therapy in adolescence. [1,.5] Proponents of two-phase treatment advocate for early intervention during the mixed dentition, citing benefits such as skeletal normalization, reduction of treatment duration and mitigation of future orthodontic complexities.[5] Conversely, advocates for single comprehensive therapy argue for treatment during adolescence, emphasizing reduced treatment time, enhanced patient compliance and minimized financial burden.[1, 2, 5]

Analysis of studies which were made in Florida, North Carolina and Manchester provides insights into the comparative effectiveness of early versus late treatment phases, encompassing parameters such as overjet reduction, skeletal changes and patient self-concept.[6, 7, 8]

In these studies, early treatment modalities, such as functional appliances like the Twin Block appliance, have been shown to effectively normalize skeletal relationships, reduce overjet and overbite and improve facial aesthetics. [6, 7, 8] Furthermore, early intervention has been associated with shorter treatment times, decreased need for extractions and improved patient compliance .[1]

Additionally, early orthodontic treatment has been shown to mitigate the risk of traumatic dental injuries, particularly in cases where there is significant overjet or protrusion of the upper incisors. [9, 10] By addressing these malocclusions early on, clinicians can minimisze the likelihood of dental trauma and enhance long-term oral health outcomes. [9, 10]

Case studies highlighting early treatment modalities, such as the Twin Block appliance, offer practical illustrations of treatment outcomes and clinical decision-making processes.[7] Examination of cephalometric superimpositions and dentoalveolar changes provides valuable insights into skeletal and dental modifications achieved through early intervention, guiding clinicians in treatment planning and assessment.[1, 7]

Treatment modalities commonly employed in early orthodontic intervention include functional appliances, such as the Twin Block appliance, headgear, and palatal expanders.[7,11, 12] These appliances exert controlled forces on the developing dentition and skeletal structures, guiding facial growth and correcting malocclusions [4, 7,11,12].

The timing of early orthodontic treatment is crucial, as it coincides with the peak of the growth period of the craniofacial complex.[3, 4]. Initiating treatment during the mixed dentition stage allows clinicians to harness the inherent growth potential of the jaws and achieve optimal treatment outcomes [3, 4].Moreover, early orthodontic treatment is often followed by a period of retention to stabilisze treatment outcomes and prevent relapse. Retention may involve the use of removable or fixed appliances, depending on the individual patient's needs and treatment objectives [2].

Economic Implications of Early Treatment:
Discussions on the financial costs of dental injuries versus orthodontic treatment shed light on the trade-offs involved in healthcare decision-making. While the immediate costs of treating traumatic dental injuries may seem lower, the long-term burden of untreated malocclusions can result in higher healthcare expenditures [1, 10].

Patient-Centered Outcomes and Long-Term Oral Health:
The impact of early treatment on patient self-esteem, bullying prevention and oral health-related quality of life is scrutinized, emphasizing the multifaceted nature of treatment outcomes beyond purely clinical parameters.[1] Furthermore, early intervention in orthodontic issues can prevent the development of secondary complications, such as temporomandibular joint disorders (TMD) and periodontal disease.[1, 2, 13] By optimizing occlusal relationships and dental alignment, clinicians can promote long-term oral health and minimize the risk of future dental problems [2].

Conclusion:
In conclusion, the debate surrounding early treatment in Class II orthodontic patients encompasses a spectrum of considerations, ranging from clinical efficacy to economic feasibility and patient-centered outcomes. While evidence suggests no significant superiority of early treatment over later comprehensive therapy in achieving optimal orthodontic outcomes, contextual factors such as patient preferences, aesthetic concerns and risk of traumatic dental injuries warrant careful consideration in treatment decision-making.

As orthodontic practice continues to evolve, informed discussions grounded in empirical evidence, clinical experience and patient perspectives are paramount in guiding treatment approaches for Class II division I malocclusions. By synthesizing current evidence and deliberating on the nuances of early treatment paradigms, clinicians can navigate the complexities of orthodontic management and deliver personalized, evidence-based care to their patients.

REFERENCES

SINGLE-CONE OBTURATION VS. COLD LATERAL COMPACTION

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During endodontic treatment, adequate root canal filling is one of the final success factors in the long-term perspective of tooth treatment. According to a European Journal of Dentistry article in 2016, the causes of endodontic treatment failures found that 65% of the cases studied were due to poor canal filling. [1] While shaping and chemical cleaning of the canal radius to remove micro-organisms are some of the most important steps in the treatment process, the rest of the success of the three-dimensional fluid-tight sealing process lies in the root canal obturation stage. [2] Lack of airtightness and homogeneity of the filling creates a favorable environment for the proliferation of microorganisms, especially facultative anaerobes, leading to a persistent microbiological infection. [3] It is important to understand that most of the complications after the first treatment are due to both technical errors and the anatomical variations of the root canal, as well as differences in the specifics of the techniques. Therefore, this article will highlight the differences and similarities in root canal filling performance between two popular techniques: single-cone obturation (SCO) and cold lateral condensation (CLC).

Understanding the Features of Gutta-percha Cones

The popularity of gutta-percha (trans-1,4-polyisoprene) as a solid root canal filler is due to its varying chemical composition. [4] In the modern era, gutta-percha has good biocompatibility, dimensional stability, and low tissue toxicity. The cone has three crystalline forms, alpha, beta, and gamma, depending on temperature changes. [5] The transformation of the beta crystalline forms into the alpha is extremely rapid, taking place in the temperature range of 53 °C to 63 °C. Gutta-percha in the alpha configuration becomes amorphous and melts above 65 °C. This amorphous material recrystallizes into any form if cooled rapidly, but if it is slowly cooled it will recrystallize into an alpha form. The crystalline form of gutta-percha used in the filling process is important because each form has different chemical and physical properties. Alpha gutta-percha is brittle at room temperature but becomes more adhesive and tacky when heated, i.e. suitable for adhesion to the dentin wall of the root canal. In contrast, when heated, beta gutta-percha is much more stable at room temperature, with weaker adhesion and less flowability. [4] Hence, beta gutta-percha is the most commonly used for cold lateral condensation and single-cone techniques.

The Properties of Cold Lateral Condensation

The classic technique for root canal filling is CLC, in which the main gutta-percha cone (beta form), the auxiliary pins, and a paste of the appropriate composition are condensed together with the interconnecting cones to remove as much of the bonding paste as possible from the canal and to fill the root canal with the solid gutta-percha cones. [6] This filling technique is time-consuming for the clinician. Still, it is appreciated for its low cost, ability to control the placement of the gutta-percha in the root canal, and lower sensitivity to the technique than, for example, warm vertical condensation. The final condensed mass is not completely homogeneous and consists of several pins pressed together with the gaps filled with a soft paste. [7] A 2017 in vitro study investigates which technique - CLC or warm vertical - has better-filling properties, i.e. whether the mass in the canal wall is homogeneous, dense, and does not leave any voids, it has been found that neither technique produces a completely encapsulated canal. [8] Consequently, nowadays CLC is considered one of the most efficient and minimally technique-sensitive root filler techniques.

The Properties of Single-Cone Obturation

The success of a filling is not only determined by the technique of the dentist and the properties of the gutta-percha cones but also by the choice of the soft paste, such as conventional resin-based pastes (AH-Plus) and bio-ceramic (BC) pastes. Its use results in better biocompatibility and adhesive properties: BK paste penetrates dentin tubules, anatomical irregularities, lateral canals, and deltas under the hydraulic pressure of the gutta-percha cone. If the filling process uses a master cone coated with BK particles, a monoblock effect is created. [9] Thus, there is no need for auxiliary cones. The sealing-filling, three-dimensional encapsulation function is performed by the BC paste, while the main plug is the source of hydraulic pressure. Therefore, modern endodontics also applies the single-cone-paste technique.

Irregular Shape Canals and Obturation Techniques

The SCO technique is associated with good results in filling round, narrow, and regular-shaped canals, but problems arise when you have an irregular canal. Oval or ribbon-shaped canals occur in about 25% of teeth, and filling these canals is a complex process as it increases the likelihood of gaps forming in the SCO technique. On the other hand, a study conducted in 2016 with Micro-CT analysis shows that in irregularly shaped canals, BC paste formed a similar number of voids as other techniques, but had the fewest gaps in the apical third of the root. [10] Although the SCO technique is not characterized by condensation and is popular due to its simplicity and fast working process, unlike CLC and other condensation techniques, SCO requires a significantly higher volume of paste, therefore a large part of the filling result does not depend on the properties of the gutta-percha cone, but rather on the paste's shrinkage, insolubility, dimensional stability, and biocompatibility with tissues. [11] Compared to resin-based pastes, using BC in the SCO methodology gives it an advantage: BC paste does not shrink during curing but expands by 0.002% of its total volume and has special flowability with dimensional stability. [10]

Which Technique Has Better Root Canal Obturation Results?

Iran researchers in 2023 conducted a study to compare the performance of SCO and CLC techniques. Four experimental groups were compared: SCO with resin-based paste, SCO with BC paste, CLC with resin-based paste, and CLC with BC paste. In the push-out bond strength (PBS) test, CLC with BC paste showed significantly better results in all thirds of the root cross-section comparing CLC and SCO with AH-Plus paste. As for SCO with BC paste, it performed better than AH-Plus paste for the same technique. Evaluating the differences between the test results, there is a significant difference: using a resin-based paste resulted in weaker root radius strength than the BC paste. The data suggest that CLC with BC paste is the best obturation method to withstand the load, with SCO with BC paste in second place. Surprisingly, in the percentage of voids tested no significant statistical differences were found between the treatment groups in terms of the percentage of voids. This leads to the conclusion that all the methodologies lead to the same formation of voids. [12]

Conclusion

In conclusion, data from endodontic studies allow us to conclude that BC pastes have better physical, chemical, and adhesion properties when compared to resin-based pastes. The high PBS test results show that CLC has an advantage over SCO and should be chosen to reduce the risk of vertical root fracture. If a dentist elects SCO as a more favorable technique during a root canal treatment, it is noted that using BC pastes instead of resin-based should be preferred. A recurrent finding in scientific literature is that, although all techniques similarly fill the root canal (no difference in the number of voids), both CLC and SCO with BC paste have the best obturation quality parameters.

REFERENCES

ENDO LOVERS:
A LOOK INSIDE THE EUROPEAN SOCIETY OF ENDODONTOLOGY

PROFESSOR FADI JARAD
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DIRECTOR OF THE PG PROGRAMMES | SCHOOL OF DENTISTRY
INSTITUTE OF LIFE COURSE AND MEDICAL SCIENCES | FACULTY OF HEALTH & LIFE SCIENCES,
UNIVERSITY OF LIVERPOOL

Opportunities for involvement:

Could you share some details about how dental students and newly qualified dentists can get involved with the ESE?

The ESE focuses on enhancing the development of endodontology for all. We represent 37 national endo societies around Europe and gather more than 500 individual members around the world.
The society aims to provide specialists and general practitioners at any stage of their careers with educational, research and clinical resources essential to their development and to patient care.
We believe that the **Student Community** is crucial for the promotion and future of advocacy of oral health and teeth saving treatments and we very much welcome all students, both at undergraduate and postgraduate levels to connect and engage with our ongoing activities and current opportunities:

- ESE is well known for organizing its **biennial congress** on even years and we are very excited to be hosting our next congress in **Paris from 3 to 6 September 2025** together with the French Society of Endodontics. Our congress will gather more than 2.500 participants from all over the world and we do have special fees and conditions for undergraduate and postgraduate students. We run a 3-day congress with several concurrent sessions, pre-congress day courses and a different range of workshops during the main programme days;
- We also make sure that we hold an educational event on non-biennial congress years, with a different format, more intimate and focusing only on one theme, allowing a more 1-2-1 delegate experience with speakers, fellow attendees and exhibitors. This is our **Autumn Meeting** which we are organizing **next September 6-7 September in Krakow, Poland**. The Autumn Meeting will focus on the recently published **S3 Level clinical practice guidelines**.
- Important news and something we are very proud of is that we have decided for the first time not only to open the **Autumn Meeting** to all but to **grant Undergraduate Students with complimentary registration**. Any student living in a country from one of our national societies, which cover basically all of Europe, can actually attend at no cost. You will find all information in the registration page eseautumnmeeting.com as we celebrate the publishing of our newest guidelines and aim at disseminating them at all levels. Other undergraduate students and postgraduate students will also have discounted registration rates, so we really hope to see some of you there!
- Both biennial congresses and autumn meetings are open to all, so members and non-members can attend!
- Here are different opportunities to showcase and share your educational, clinical and research papers with the endodontology community:
  - Both Dentists and students can submit research abstracts and clinical posters to present at the biennial congress and also apply for the ESE annual research and educational **grants and prizes** (more information available at https://www.e-s-e.eu/for-professionals/ese-grants-and-awards/)
- One of the best ways to be updated with endo practice is to join your local endodontic society as you will automatically become a member of the ESE and benefit from being an ESE member. Both students and dentists can also take advantage of the various information available on our website and read the freely downloadable ESE position statements and guidelines available there (e-s-e.eu).
- More opportunities and news on our activities are constantly shared through our official social media channels (FB, IG, IN, YouTube, and X), so stay tuned!

What are some of the benefits and opportunities that come with being a member of the ESE?
Joining the European Society of Endodontology (ESE) offers numerous benefits for individuals interested in endodontics. Being part of the ESE allows members to gain recognition as specialists or certified professionals, which can be used on CVs, practice documentation, and signage.

Members also enjoy reduced registration fees for ESE congresses and meetings, as well as a subscription to the International Endodontic Journal (IEJ) at a discounted rate. Additionally, members receive emails about events and news, invitations to social events, and the opportunity to have their personal details listed on the ESE website for public access.

Members have the opportunity to network with colleagues within the ESE, attend biennial Autumn Meetings, and participate in planned scientific oral sessions dedicated to various membership groups at the biennial conference. Overall, ESE membership provides a platform for **professional development, recognition, and engagement within the endodontic community.**
Find more details about the different membership categories here. (https://www.e-s-e.eu/join-us/join-as-an-enhanced-member/)

Current Projects and Initiatives:
What are the ESE's current key projects and research initiatives?
The ESE's most recent key project was the development of the S3-level Clinical Practice Guidelines for the treatment of pulpal and apical disease, focusing on the diagnosis and the implementation of the treatment approaches required to manage patients presenting with pulpitis and apical periodontitis (AP) with the ultimate goal of preventing tooth loss.

This year's **ESE Autumn Meeting** is focused on "Lessons learned from the ESE S3 guideline process." The meeting will revolve around recommendations and evidence-based practice in endodontics; the purpose is to **simplify the message and discuss where we are now in endodontic practice** and the evidence we need to improve.
More recently, the ESE published updated **Undergraduate Curriculum Guidelines** for Endodontology. These guidelines include a list of capabilities that the graduating student will be expected to have achieved to provide a minimum level of competency in endodontics. You can find the full set of updated guidelines here.

How can young professionals participate in or contribute to these projects?
Through membership in the society and networking with other ESE members at events, congresses and meetings, you can learn more about the exciting upcoming and ongoing projects in the European Endodontic Community and forge relationships that might present opportunities to be **involved and contribute in ESE** committees and workshops.

Support for Academic Careers:
What specific resources and support does the ESE offer to young professionals who are interested in an academic career in endodontology?
As well as the updated undergraduate curriculum mentioned above, the ESE is also currently updating **its Postgraduate Specialist Training Guidelines**. By updating the guidelines, the ESE is responding to a public and professional need for consistently high standards of training and specialist clinical service within Europe.

Are there any mentorship programs, research grants, or scholarships available through the ESE for students and newly qualified dentists?
Currently, the ESE does not offer mentorships or scholarship programs; however, we are working to provide **new opportunities for young professionals**, such as scholarships, in the near future, so stay tuned!

The ESE offers **annual research grants** to support research and education in Endodontology which any member or those associated with a member can apply for. Contact your associated society or associated academics in your region to get involved.

European Society of Endodontology

GOING GLOBAL

Ben Wilson and Sam Lawton
University of Dundee, United Kingdom

During the summer of 2023, 11 students from the University of Dundee completed a 5 week elective in 3 countries. Fourth year dental students must spend 20 days on an elective placement. Electives can be spent abroad or at home and students usually volunteer, take part in a research project or observe specialist dentists. Our group decided to visit new countries which were culturally and dentally different from our own to gain experience observing and practising dentistry and to help improve the dental health in these areas. After a week in Thailand holidaying in the Phi Phi Islands and partying on the infamous Khao San Road. Then we headed to Cambodia.

Cambodia is an amazing country, however, from 1975 to 1979 it was ruled by a radical government called the Khmer Rouge. It is estimated that between 1.5 and 3 million people lost their lives due to the genocide committed by that government. Cambodia lives with a legacy of poverty, including limited access to medical and dental services. We volunteered with the charity One-2-One and spent two weeks in two different locations providing basic oral health care to children who otherwise would not have had access to it.

Our first location was at the Siem Reap School for the Deaf and Blind. Communication here was a major challenge for us. We had learnt some very basic Khmer, but our Khmer Sign Language skills were sadly lacking! Luckily we had helpful dental students from the University in the capital, Phnom Phen, and teachers from the school to help translate for us. This experience underlined how important clear dentist-patient communication is and something we often take for granted.
The second location was a pop-up clinic in a high school near Oudongk. Care was provided on reclining deck-chairs and there was no aspiration, meaning the patient had to sit up and spit when required. This made providing treatments such as composite restorations difficult, however, we soon adapted and picked up some new techniques from the supervising dentists and students. Additionally, we used materials that are less common in the UK such as Silver Diamine Fluoride. Although familiar to us, many parents decline the use of it due to staining of the teeth.

The main difference we noted compared to the average paediatric patient in Dundee was the greater rate of caries, especially interproximal caries in the anterior region. We noticed that opposite both schools were shops selling sugary drinks and sweetened coffee. Lack of oral hygiene and dietary awareness were both issues and advice was given by the Cambodian dental students.

In the UK the most likely reason for a child to have a general anaesthetic is to have teeth extracted and providing oral care for UK children can sometimes be a struggle. However, the children in Cambodia were mostly very willing to be seen and have treatment carried out with local anaesthetic. Many of these children would not be able to travel to the larger cities to be treated in hospitals and are just very grateful to be seen.

The exchange program was a fantastic experience for everyone and it underlined the importance of knowledge sharing and collaboration between institutions globally. For anyone considering an international exchange programme we recommend asking your university or dental school for their partnership contacts at international universities.

Next up, was a 2-week exchange with the Universiti Malaya in Kuala Lumpur, Malaysia. The dental school at the University of Dundee has long-standing relations with universities in Malaysia, such as the International Medical University (IMU), also based in Kuala Lumpur. As part of this partnership, many students from IMU transfer to Dundee to complete the last three years of their undergraduate dental training. These students are integrated into the existing year groups at Dundee, where they benefit from the high-quality training provided at the dental school and enjoy being immersed in Scottish culture, before being awarded the degree Bachelor of Dental Surgery (BDS). As the UK-based BDS is recognised by many countries around the world, students benefit from increased career opportunities. Many of these students choose to remain in Scotland after graduation, beginning their careers in the National Health Service (NHS). Both the University of Dundee and IMU retain strong links with many partner institutions around the world and this particular partnership has proven to be an effective method of knowledge sharing and international collaboration.

Our student group was invited to spend two weeks within the restorative dentistry department at the Universiti Malaya. During the first week, we received tutorials on endodontics from Associate Professor Dr Hany Mohamed Aly Ahmed, and further tutorials on dental implants and digital dentistry from Dr Yeoh Oon Take. These tutorials helped build on our existing knowledge of the subjects and encouraged us to consider carrying out our own research in the future.

The standard of research that was being conducted at the Universiti Malaya was impressive. Many of their clinicians are amongst the leading specialists in their disciplines and are world-renowned for their achievements in research. We were also unaware of their deep-rooted connections and constant collaborations with other specialists and institutions around the world explains much of their success.

During the second week of placement with the restorative team, we shadowed consultants and postgraduate students performing second stage implant surgery with soft tissue grafting, crown lengthening surgery and periodontal regenerative surgery. These impressive sessions demonstrated to us that global collaborative efforts from skilled and experienced clinicians and institutions are ensuring that evidence-based dentistry is always developing.

To mark the end of our exchange Universiti Malaya staff members and students presented a talk about their university's history. In turn, we were invited to provide our own presentation on our dental school and our culture. We were then honoured to speak and chose to discuss the importance of our university's dental student society and its positive impact on student experience. We also described our involvement and experiences, as university representatives, with both the BDSA and EDSA. We outlined their roles and influence on us as UK dental students.

The exchange program was a fantastic experience for everyone and it underlined the importance of knowledge sharing and collaboration between institutions globally. For anyone considering an international exchange programme we recommend asking your university or dental school for their partnership contacts at international universities.

Our group thoroughly enjoyed the elective and will cherish the lifelong memories and friends made on the way. It has given us an insight into different cultures, helped us to build our skills and confidence in dentistry and has also underlined the importance of international collaboration and its contribution to improving global health.

We would like to take this opportunity to thank everyone who helped plan and accommodated us during this time.

AN ELECTIVE IN SRI LANKA

MILTON JUSTINSUTHAKARAN,
QUEEN MARY UNIVERSITY OF LONDON
FOUNDER OF BTDA

The British Tamil Dental Association (BTDA) is an organisation we set up for Tamil dental professionals in the UK. We felt it was a way to address our community's needs and interests by providing a space to connect, share knowledge, and advocate for ourselves. For example, we held a mini-conference at Guy's Hospital in London, with very successful and insightful guest speakers. The aim is also to offer cultural support, continuing education opportunities, and serve as a charitable resource for those back home in Sri Lanka and other parts of the world.

Mario Creatura, a former Special Adviser to the UK Prime Minister, released some statistics on British Tamils in January 2023. He stated that "1 in 10 medical doctors in the English NHS is Tamil." This statistic was incredibly moving. As a very small minority group within the UK, Tamils make a disproportionately large appearance within the NHS, especially among medical doctors.

This inspired us, as dental professionals, to make our presence known within the dental community too, as there are many notable and reputable Tamil dental professionals working within the UK and abroad.

As an organisation, we have many goals that we want to attain, but as of now, Public Health is at the forefront of our vision. Last year, a group of us took off to Sri Lanka, with a mission to deliver dental aid, resources, and oral hygiene education to those struggling with limited healthcare access. Our trip focused on Jaffna and Kilinochchi, regions affected by civil war and limited access to healthcare, especially dentistry.

We partnered with Jaffna Teaching Hospital staff to deliver oral health education talks and materials in schools, orphanages, and retirement homes. Over 400 children and adults received fluoride toothpaste and toothbrushes thanks to fundraising and sponsorships. We also developed a good relationship with senior staff at the hospital who allowed us to observe patients at the Oral Maxillofacial and Cancer unit, gaining valuable experience on head and neck conditions. Dental check-ups and fluoride varnish application were provided to children in orphanages, many of whom had never seen a dentist.

The aim is to cultivate a sustainable dental mission that flourishes for years, even generations, to come. This means creating a framework that ensures our efforts have a lasting impact and can be easily replicated and expanded upon in the future. Currently, we are aiding the creation of an Institute of Oral Health Sciences based in Jaffna, that will act as a base for research, dental education and community engagement.

We wholeheartedly welcome individuals from all backgrounds, not just Tamils, to join us in our ongoing ventures and events! A diverse team brings a wealth of perspectives and skillsets to the table, enriching the mission and fostering a spirit of inclusivity. Whether you're a dentist, hygienist, educator, fundraiser, or simply passionate about global health, your contribution can be invaluable. Please follow our Instagram - @btda_uk

AN ELECTIVE EXPERIENCE IN MUNICH

Matija Boravac
University of Zagreb, Croatia

I am Matija Borovac, a fifth-year dental medicine student at the School of Dental Medicine, University of Zagreb. During the past semester, I had the privilege of participating in a five-month student exchange program at Ludwig-Maximilians-Universität in Munich. The application process commenced in February 2023, with acceptance notifications from the German institution in June. I embarked on my academic journey with my colleague Ana in Germany in October 2023. A significant challenge, which also served as an advantage, was the required knowledge of the German language (a B2 certificate was necessary). Exchange students are treated no differently than German students, necessitating seamless communication and language proficiency.

The educational approach in Germany differs considerably from the one in Croatia. Our schedule at the Faculty was remarkably consistent; from Monday to Thursday, we engaged in clinical exercises starting at 9:00 am. Lectures were conducted on Fridays and were also available online—a feature that greatly facilitated the learning process. The aspect I most appreciated about the clinical practice, which demonstrated a fundamental difference in the educational systems, was the expectation of complete autonomy. Each student in Munich receives a "box" (mini-clinic) equipped with instruments and materials. We were responsible for independently communicating with patients, scheduling appointments, ensuring the sterilization of instruments, preparing materials for various procedures, and documenting findings.

The dynamic between professors, assistants, and students also varies significantly from what I was used to in Croatia. There was a high expectation of knowledge (with specific procedures to prepare for each day), and professors/assistants primarily served as overseers of the performed procedures. The high level of German discipline and pursuit of perfection were evident in our experience in the clinic; all procedures had to meet specific standards, and if a professor was dissatisfied, the student had to reschedule the patient for the same procedure.

Initially, it was hard to accept criticism and spend additional time repeating and correcting work, but over time, I recognized it as an opportunity for growth. I developed independence, organization, and adaptability—skills that will undoubtedly benefit me in my future career and life.

A semester at LMU significantly enhanced my knowledge and skills in dentistry and encouraged an openness to new methods and techniques. German students use dental loupes for all procedures, each dental chair is equipped with an intraoral camera, and I was particularly impressed when performing my first endodontic treatments using a microscope.

Another notable difference is that German students must fabricate all prosthetic replacements themselves in the laboratory. This requirement can be quite stressful, as it demands considerable time in the laboratory after completing regular academic duties.

After the winter semester, German students enjoy a holiday period lasting slightly over two months, during which they have the opportunity to engage in clinical exercises from other courses. I opted to extend my stay in Munich to participate in clinical exercises in maxillofacial surgery for a week.

The most valuable aspect of my Erasmus experience was undoubtedly the friendships I made. Munich is an ideal destination for international students, supported by a vibrant Erasmus Student Network (ESN) community. Weekly events, trips, and museum visits were organized, and the connections I made will certainly last for a lifetime. Together, we explored German culture and various European and global cultures, given our diverse backgrounds.

Living in a foreign country with such a different lifestyle from that in Croatia allowed me to embrace new experiences and adapt to various situations. Munich's central location in Europe and its excellent train transportation system allowed us to travel extensively during weekends. Reflecting on my decision to participate in the exchange, I can confidently say that it was one of the best decisions of my life. This experience not only transformed my perspective on dental medicine and practice but also profoundly influenced my personal development. As I look back on my Erasmus days, I feel immense gratitude for the experiences and look forward to future opportunities. The semester in Munich was not merely an educational chapter but an unforgettable experience that I believe everyone should experience at least once in their lifetime.

CREATING A MEANINGFUL IMPACT

better smile foundation

An interview with BSF President Iliais Visakis, University of Athens, Greece

Better Smile Foundation (BSF) is a non-profit organisation based in Greece, which was founded in 2023 with the mission to raise awareness of the significance of preventive dentistry across the world.

Can you tell us about the inspiration behind founding the Better Smile Foundation and its mission?
The inspiration behind the Better Smile Foundation (BSF) came from a shocking realisation from our founder, Dimitris Papakyriakopoulos, about the state of dental care in Greece, which highlighted some alarming statistics. According to the data, Greece does not allocate public money for dental care, making it one of the few countries with virtually no public coverage for dental care in Europe. Furthermore, a significant portion of the Greek population does not visit the dentist regularly. In 2019, around 30% of adults reported unmet needs for dental care due to financial reasons, one of the highest rates in Europe.

Although Greece lags behind the rest of Europe in proper dental care education and prevention awareness, dental problems are a pressing global concern, highlighting the urgent need for comprehensive prevention strategies. For example, tooth decay is one of the most common chronic diseases worldwide, even though it is considered to be largely preventable and it affects approximately 2.8 billion people globally according to WHO.

Witnessing these stark disparities, the mission of the Better Smile Foundation is not only to improve overall dental health in Greece but to contribute to a global movement towards preventive dental care. We are inspired by the findings of the Coalition on Oral Health, in which it is stated that "Every dollar invested in preventive oral healthcare saves between $8 to $50 in restorative care". Our goal is to ensure that everyone, regardless of their financial situation, has the right knowledge and tools needed to maintain good oral health.

Could you share some of the main initiatives or projects that the Better Smile Foundation has undertaken to promote preventive dentistry?
The Better Smile Foundation operates through two main pillars as a part of our mission to improve oral health standards globally. Initially, we focus on dental education and prevention, in which we engage in a variety of outreach activities aimed at raising awareness about preventive dentistry and promoting proper oral health practices. We conduct educational visits to schools where we deliver interactive and engaging sessions to teach children the importance of maintaining good oral hygiene from an early age. Moreover, our outreach extends to organisations, companies, and social and philanthropic institutions, where we provide workshops and informational sessions tailored to diverse audiences. We give special attention to children, including those in institutions supporting children with chronic diseases, ensuring they receive tailored oral health guidance to mitigate the risk of complications during their treatment. We also collaborate with companies to incorporate dental health into their corporate wellness programs, emphasising the significance of oral health in overall well-being.

The second pillar of our initiatives focuses on advancing dental science through rigorous research and professional development. We undertake scientific research projects aimed at generating new insights into dental health and disease prevention. Our team actively participates in national and international dental conferences and workshops, presenting our findings and engaging with other experts to stay abreast of the latest developments in the field. We partner with academic institutions, research organisations, and other stakeholders to conduct comprehensive studies across various domains, including sports dentistry, where we explore the impact of oral health on athletic performance.

How do you engage and involve dental students in your efforts, and what role do they play within the organisation?

We, as an organisation, wish to welcome all dental students, professionals and professors to join our mission towards dental equity and better prevention. Starting from Athens, we aim to attract talented dental students from universities across the world and create small hubs in numerous cities that advocate for better prevention and oral health practices. We constantly engage students by offering them opportunities to participate in our initiatives as volunteers. This involvement can take several forms, including contributing to our research projects, where they can gain valuable experience and insights into dental science. Additionally, we encourage students to accompany us on our visits to schools, organisations, and institutions, where they help deliver educational sessions and interact with the community. We strongly believe that by attracting dental students from their nascent academic years and by offering them the opportunity to be part in a voluntary and philanthropic cause, we can help cultivate the next generation of dentists; a generation that goes beyond the strict dental profession, that is active for its community and that it is interested in leaving a long-lasting impact.

"BY FOCUSING ON THESE MANAGEABLE STEPS, YOU CAN CREATE A LASTING AND MEANINGFUL IMPACT IN YOUR COMMUNITY"

What advice would you give to other dental student organisations looking to promote preventive dentistry in their communities?

My primary advice for dental student organisations is to focus on spreading the message about preventive dentistry within their immediate reach. Don't aim to change the world by trying to capture a million people right away; instead, concentrate on making a positive impact on the lives of a hundred people first. Start by educating and engaging your local community through workshops, school visits, and social media campaigns. Form partnerships with local dental professionals and health organisations to strengthen your efforts. Create volunteer opportunities for students to gain hands-on experience and become passionate advocates for preventive dentistry. As you make a difference in these smaller circles, your influence will naturally grow, leading to broader awareness and better oral health outcomes over time. By focusing on these manageable steps, you can create a lasting and meaningful impact in your community.

Helping the homeless in London

Angela Chen
President of KCL on the Streets
King's College London, United Kingdom

KCL On The Streets is a homelessness action society. Our aim is to help the homeless in any way that we can and always to the best of our ability. This is mainly through outreaches where we hand out hot drinks and sometimes food, but most importantly, take the time to sit down with people and have a chat. It may not seem like much but we believe that a little warmth, respect and kindness has the potential to make someone's day better, which can be so important. We also raise money through fundraisers and raise awareness through talks - often run by local charities.

The society was started about 10 years ago, with the idea of helping with loneliness and doing something for the community. We understand that as students we are not capable of eliminating homelessness, as fundamentally, it is an issue that needs to be addressed at a national level. The CHAIN (Combined Homelessness and Information Network) reports for the year 22/23 showed that there were over 10,000 rough sleepers in London, and almost 6500 of these were sleeping rough for the first time. Extensive change needs to happen, but we understand that students may not be in a position where they can donate, so as a society our main goal is to have students engaging with the community, raising awareness of the issue of homelessness, and becoming change makers.

What inspired you to take on the role of president of KCL on the streets?

I became the president of the society this year as I wanted to be more involved with the direction and organisation of the society. My inspiration to take on the role of president stemmed from wanting to do more to help. I think that it is so important to show kindness to everyone, and throughout dental school and the dental profession we are always encouraged to show patients kindness and respect, so why should this be confined to dental school?

I believe that we shouldn't take being able to study at a university for granted. It is our duty to give back to the community and help people that may be less fortunate than us, no matter how small the action. Therefore my goal as president has always been to engage more students with volunteering, delivering bigger projects to benefit more people and most importantly break down societal barriers. I hope that in this way, we are able to inspire more community support and action, and continually address challenges.

How does KCL on the streets contribute to addressing homelessness in London? Can you share any specific initiatives or projects the society has undertaken?

As mentioned earlier, outreach is at the centre of our society. This year we have put in a collective effort to increase the number of outreaches per week, and on a normal week, we now have at least one group going out every day. So far this year, we have poured about 370 drinks, completed over 125 hours of outreach sessions, with over 85 individual volunteers.

The biggest project we run during the year is Project Santa - a project that won the Community Impact Project of the Year award from the Student Union. This year, we were able to secure over £1000 in funding, which we used to assemble 50 bags filled with necessities such as water, gloves, thermal socks, a first aid kit, a toothbrush, and toothpaste and nutritious ready meals among other items. We ensured that 10 bags were dedicated to women by including sanitary products in addition to everything else. On top of these necessities we also added a handmade Christmas card with messages of support and kindness. This was to give the bags a personal touch, and was one of the ways that we made the project accessible for all students to participate in.

75TH EDSA MEETING COIMBRA

30th of March - 4th of April, 2025

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