

EDS/Magazine

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EDSA Magazine

Meet the Editorial Team!



Editor in Chief

Dear Readers,

As the proud editor of EDSA Magazine, I'm thrilled to welcome you to the highly anticipated Spring edition, a testament to the collaborative spirit and shared goals within our vibrant dental community.

My sincere thanks go to my exceptional co-lead team - Buse, Iva, Ria, and Yaqoub - whose unwavering support has played a crucial role in shaping the vision of our Association. Together, we've strived to positively impact the dental student experience continent-wide.

Reflecting on my past role as the United Kingdom's delegate has significantly influenced my approach to editing this magazine. My goal is clear - to keep dental students informed, inspired, and connected to the dynamic activities, opportunities, and remarkable members of our community across Europe.

This edition features contributions from diverse backgrounds, aiming to captivate your interest and leave you inspired, wellinformed, and connected.

Dear EDSA Family,

Firstly, I would like to thank the editorial team, Buse, Yaqoub, and especially Joshua, who introduced me to the work of EDSA Magazine. This is my first year being involved in this team and going back through the last few months, it was all worth it.

It was challenging to choose which of the submitted articles to include in the final one because almost all of them cover very demanding cases and it was my pleasure to participate in the selection of and see how with such motivated students the development of dental medicine is guaranteed.



Co-Editor

EDSA Magazine

Meet the Editorial Team!

Jagoup Juran



Dear readers,

Collaborating with Joshua, Buse, and Iva to bring together this year's Spring Edition of the EDSA Magazine has been nothing short of a brilliant experience. As co-editor, I've had the privilege of engaging with the works of student writers from across Europe, and have been truly impressed by the quality of their submissions. As a result, I'm excited to present this edition which is filled with a variety of insightful submissions, and would like to extend my sincere gratitude to all of our contributors.

I look forward to working on our Summer Edition and would encourage you all to share your ideas and articles. But for now, sit back and enjoy the magazine!

Co-Editor

Dear EDSA Family,

I must say that it is always a pleasure for me to work for the EDSA Magazine and I want to thank Joshua, Iva and Yaqoub for making this excellent issue together. I spent such a great time working with them and I'm really appreciated for the hard work we've done. I also would like to thank all of the writers and EDSA members for making this magazine so valuable. I hope you have a wonderful meeting in Bucharest and really enjoy while reading our magazine. See you in the next issue!



Co-Editor



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European Dental Students' Association

2023/24 Delegates

















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ITERVIEW WITH EDSA PRESIDE

Deniz Naz Bilgiç

can trace this journey back to my active involvement in YUDSA, my faculty student association. It all began when I had the opportunity to join the local committee of the EDSA Mobility project during my second year of studies. This initial experience sparked my interest in a faculty intertwined with EDSA. participated in various national and international dental events, both as a participant and an organizer, I realized that becoming a member of the EDSA Board could greatly enhance my skills and knowledge. Consequently, I decided to run for the position of EDSA Mobility Officer and was fortunate enough to be selected. Serving in this role during a year marked by a post-pandemic revival, where we organized numerous mobility projects, was truly rewarding. Continuing my involvement, I then served as the general secretary on the EDSA Board. Finally, this process led to me being elected as the president of this association, which I deeply cherish and consider as my family.

As president-elect, I've outlined several key goals for my term. Firstly, maintaining EDSA's current image and activity is paramount. Additionally, I aim to bridge the gap between different concepts and departments within EDSA, increasing collaborations instead operating independently. I envision a year where we blend ideas and projects seamlessly. For instance, I want all board members to participate actively prevention campaigns rather than treating them as separate from research or training initiatives.

YEDITEPE UNIVERSITY, TÜRKIYE



Moreover, I'm eager to see longstanding onsite projects come to realization, prioritizing action paperwork. Strengthening EDSA's over partnerships is also a priority, with the aim of enhancing representation and having strong relationship. While there are many more goals and priorities I could list, what truly matters is our collective effort and the results we achieve. Therefore, my primary focus is on the teamwork to assess our accomplishments by the end of our term.

the collaboration terms of and communication, one of our main goals is to make edsa active on many online platforms in order to reach more of the European dentistry students we represent. We aim to reach them in many ways such as Instagram, Facebook, Linkedin, Spotify and our website. We observe that we eliminate the geographical barriers between us in this way and come into contact with more students every year. Apart from our meetings, the mobility projects, prevention campaigns, volunteer work, webinars, podcasts and other projects we plan to organize throughout the period also contribute greatly to reaching the more students we can reach. The help of our delegates in this regard 's absolutely undeniable.

It is very important for us that EDSA, which currently represents 35 member countries, preserves its core values while increasing its representation with new colors and projects.

The upcoming Edsa Bucharest meeting is expected to set a high standard and exceed our expectations. We're thrilled to host our 73rd meeting with a highly experienced local committee at the helm. Their professional approach, focused on various meetings rather than just student congresses, has impressed all board members, myself included. Meeting Romania's capital spring, a country with active EDSA members, adds to our excitement. We anticipate successful meeting where we'll reconnect with **EDSA** alumni, engage in joint training sessions, and share perspectives. This meeting offers a platform for participants showcase their ideas, engage in fruitful discussions, attend educational sessions, and enhance their skills through workshops. Additionally, it provides opportunity network and have fun with future colleagues. confident that participants will return home feeling happy and satisfied with their experience.

While I hesitate to claim expertise in this domain, I offer some friendly advice to dentistry students. I encourage them not to overlook any opportunity, congresses, meetings, or seminars offer invaluable lessons, networking opportunities, personal growth seldom found in routine daily life. Active participation can lead to national international achievements. However, it's crucial to remember that true achievement involves not just visibility but also fulfilling all requisite responsibilities properly.

More about me...



WITH PRESIDENT OF BUCHAREST LOC

Marinca Rizea

UNIVERSITY OF MEDICINE AND PHARMACY CAROL DAVILA BUCHAREST, ROMANIA

Dear EDSA's Magazine readers,

In the heart of eastern Europe, Bucharest, the vibrant capital of Romania, plays host to the prestigious 73rd EDSA Meeting (14th-19th of April). As one of the most significant events in the dental student community, this gathering promises to be a nexus of learning, collaboration, and cultural exchange.

For us, spearheading the 73rd EDSA General Assembly has been a journey marked by dedication, teamwork, and innovation. It has provided an invaluable opportunity for personal and professional growth, allowing team members to hone their organisational skills, expand their networks, and gain firsthand experience in managing a large-scale international event. Organising such a prestigious event in Bucharest has been a monumental undertaking, requiring meticulous planning and a harmonious collaboration with the EDSA Board members. Months of preparation have gone into ensuring the seamless execution of every aspect of the congress, from securing venues and accommodations to curating an enriching scientific program.

Moreover, the congress serves as a platform for fostering collaboration and knowledge exchange among dental students and professionals from diverse cultural backgrounds. Through scientific sessions, workshops, and social events, participants have the opportunity to share insights, best practices, and innovative approaches in dentistry, enriching their understanding and perspective on the field.

We think that the 73rd EDSA General Assembly and Congress represents not only a milestone for the European dental student community but also a celebration of collaboration, diversity, and excellence in dentistry.

We are thrilled and deeply honoured to host this event, which promises to be a memorable gathering for all participants. The opportunity to welcome esteemed dental students and professionals to the vibrant city of Bucharest fills us with excitement and pride. We look forward to creating an enriching experience for everyone involved, fostering collaboration, learning, and cultural exchange throughout the congress.

Our Association is thrilled and deeply honoured to host this event, which promises to be a memorable gathering for all participants. The opportunity to welcome esteemed dental students and professionals to the vibrant city of Bucharest fills us with excitement and pride. We look forward to creating an enriching experience for everyone involved, fostering collaboration, learning, and cultural exchange throughout the congress.

The EDSA Meeting Bucharest LOC



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Faculties

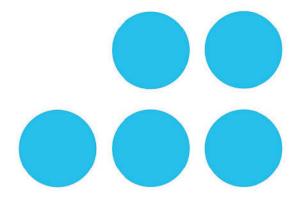


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Why is Dubrovnik an ideal host city for an EDSA **Summer Camp?**

The answers to this query are abundant and extend beyond the scope of this article! First, I could say that the camp in Dubrovnik has become a tradition - the fact that it is the oldest mobility project of EDSA proves the camp's consistent quality. I am incredibly proud to participate in the project that students from the University of Zagreb initiated 13 years ago, and it's noteworthy that the project has maintained its popularity and relevance throughout this time. Scheduled for the summer, from August 11th to 17th this year, the project unfolds in a city that seamlessly blends historical importance, architectural splendour, and cultural vitality, rendering it one of the most renowned and frequented destinations on the Adriatic coast. Notably, the project unfolds in my home county, adding a personal touch as I proudly acknowledge my role in its organisation.









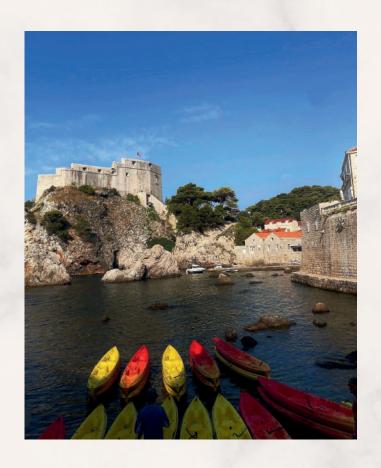


How does the committee plan to integrate Dubrovnik's local culture, heritage, or attractions into the event's program to provide a unique experience for attendees?

First, I would like to express my gratitude to my Local Organising Committee team: Iva Biloš, Klara Križan, Bruno Sudarević, and Borut Šraj, who are dedicatedly working to bring this year's program to life. The camp coincides with the peak of the tourist season, allowing participants to indulge in the captivating attractions of Dubrovnik. The iconic city walls, undoubtedly the main draw, provide a backdrop for the most enviable photographs. A special afternoon/evening is reserved for a cable car ascent to Mount Srđ, offering a breathtaking panorama of Dubrovnik at sunset. Additionally, we've arranged a guided kayaking tour for a unique perspective of the Old City. Dubrovnik's irresistible charm, blending historical grandeur, scenic beauty, and vibrant cultural offerings, ensures that each participant will discover something resonant while staying in our country.

Are there any specific topics or themes that the event aims to highlight this year?

Given that the camp takes place in the summer months, the atmosphere is always relaxed and friendly. Throughout the week-long camp, workshops and lectures are conducted by professors from the University of Zagreb, but we also take pride in the fact that we have also had guest lecturers for several years now. Also, we want to emphasise that an increasing number of dental companies recognise us each year. This recognition allows participants from dental faculties across numerous countries to stay abreast of the latest research and trends in dental medicine. Beyond the academic segment of the program, which brings together renowned European speakers and brands in Dubrovnik, we are also introducing new elements in the realm of cultural activities this year. A day during this week will be dedicated to a journey on the traditional boat Karaka and an excursion to the Elaphiti Islands near Dubrovnik. This allows participants to discover not only the beauty of Dubrovnik itself but also the enchanting surroundings. Of course, we have more surprises planned, but to maintain an air of mystery, I encourage you to apply and uncover firsthand what awaits.



Beyond the academic content, what aspects of visiting Dubrovnik and attending this Summer Camp do you believe make it a memorable and worthwhile experience for students?

The primary aim of our camp is to facilitate the exchange of ideas and experiences while enhancing knowledge in the field of dental medicine. We welcome 25 students from diverse European countries each year, allowing them to form connections, create cherished memories, and establish enduring friendships. Our project has always been described as unique since there's a particular joy in bonding with colleagues, progressing in our field, and relishing the beauty of the blue sea and sun, all while far from academic stress. Witnessing the participants' happiness at the week's end is a rewarding experience for us in the Organizing committee, and it's genuinely heartening to see these individuals maintain their friendships even years later. Words can hardly capture the unique and enriching experiences that await you, so I encourage you to apply for the camp in May, and I hope to see you in Croatia in August!

JOIN US!

LOC president

Majja Porovac

UNIVERSITY OF ZAGREB, CROATIA



72ND EDSA GENERAL **MEETING**



Ramin Torkizadeh UNIVERSITY OF LIVERPOOL

UNITED KINGDOM



When did you first hear about the EDSA?

I had the pleasure of discovering EDSA through two prominent sources, one of them being the esteemed former BDSA president, Jitesh Jassal. He shared exciting news about a forthcoming European meeting set to take place in Liverpool next summer. The second was Professor Quinn, a respected member of our university, who personally conveyed this remarkable opportunity to me. Inspired and eager to contribute, I enthusiastically accepted the role of president.



What inspired you to run as LOC President for the 72nd EDSA General Meeting in Liverpool?

I was thrilled at the prospect of running for the position of president of the LOC, driven by a confluence of compelling factors. My attendance at various BDSA events had been both enriching and enjoyable, sparking a deep desire to not only participate but also take the reins in hosting events on a European scale. The opportunity to engage with a diverse and expansive audience is, to me, an unequivocal no-brainer.

My passion for global dental advancements further fuels my eagerness to connect and collaborate with like-minded individuals across Europe. The prospect of networking on such a grand scale is not only exciting but also aligns with my interest in staying up to date with international developments in the field of dentistry.

Prior to pursuing this leadership role, my journey involved active participation in several associations, where I honed my skills in social media communications and other avenues. Having tread the path of a dedicated member, the time felt right for me to transition into a leadership role, as I was ready to leverage my experiences to work collaboratively and lead effectively.

How do you feel students will remember the 72nd EDSA General Meeting?

I feel students will remember the Liverpool meeting as a resounding success. I had the pleasure of collaborating with an exceptional team — Mahan Jabbari, Eugene Chen, Rosha Mobasher, Hannah McGrath, and Jonathon Cameron — who worked tirelessly to orchestrate a truly outstanding conference.

The socials were nothing short of fantastic, creating a vibrant atmosphere throughout the week. Special appreciation goes to Neapolitan Liverpool for ensuring the participants were not only well-connected but also well taken care of. From exploring Liverpool's major sights to indulging in the city's renowned bars and clubs, every aspect of the week was carefully curated to provide a memorable experience.

The pinnacle of the event was undoubtedly the gala dinner at the Spine, an evening that participants unanimously hailed as the best gala they had ever attended. The inclusion of a chocolate fountain, prosecco tower, and a saxophone player were just a few of the elements that contributed to the conference's undeniable success.

Despite facing financial constraints in the UK compared to other regions in Europe, our team delivered an exceptional conference that was wholeheartedly appreciated by the participants. Their positive feedback stands as a testament to the dedication and ingenuity that went into making this event truly smashing!





What advice would you have for future EDSA General Meetings?

When offering guidance for future EDSA general meetings, I'd like to provide tailored advice for both participants and organizers alike.

For participants, my advice is simple: immerse yourself in the experience. Engage with everyone, embrace the diverse community, and most importantly, have a great time. The connections forged at these conferences are not just fleeting; they often blossom into lifelong friendships. The bonds formed in these meetings are truly special.

Now, addressing organisers, my suggestion is to keep the team compact and efficient. Avoid the pitfall of an overly large team where motivation might wane. Set clear standards and assemble a team that shares your vision. Leverage each member's strengths, delegate tasks fairly, and establish realistic deadlines. A positive and joyful environment is a fertile ground for productivity, and maintaining that positivity is paramount. Recognizing and rewarding the team's efforts is crucial. Whether it's through celebratory meetings or ordering pizzas, the impact of showing appreciation is astounding. Witnessing how everyone excels when they feel valued is a testament to the importance of fostering a supportive environment!

Can you provide an overview of the most recent volunteer project organized for dental students in Liverpool?

The Liverpool Pre-congrees volunteer project was the second of its kind. We followed up on the work of the successful first volunteer project adjacent to the EDSA meeting, which took place in Istanbul in April 2023. In Liverpool, we managed to get in touch with an excellent kid's centre called KIND, which has had plenty of experience in helping kids from various backgrounds. All day during Saturday we stayed with the kids and showed them interesting presentations about oral health and dental hygiene and in the afternoon, individual instructing of the proper brushing techniques took place. Kids received toothbrushes and various gifts from our amazing sponsors. I believe our volunteers enjoyed it and we also got great feedback from the KIND centre. We spent Sunday morning on a Liverpool city walking tour where our volunteers got a chance to get to know the city and history a little bit better. In the end, I believe it was a successful event.

How does this project fit into the broader objectives or initiatives of the European Dental Students' Association?

Since one of the initiatives of EDSA is Oral Health Promotion, we decided to apply this goal to a broader general public and spread the awareness among them, in the "streets". Our goal was to help the community in different ways while we stayed at the destination of our regular meetings. It is quite usual that the students, who attend EDSA General Meetings, come to the destination several days before the start of the meeting. This way, they can not only enjoy the beautiful scenery of the city but also be useful and helpful in a way. We agreed that this help could come in many ways - environmental help, education about the necessity of proper oral health, helping the less fortunate group of people or rescued animals. It can vary from location to location but the main goal stays the same: selflessly help the community. I believe this fits into the EDSA objectives perfectly.



UNIVERSITY OF PAVOL JOZEF ŠAFARIK, SLOVAKIA





Based on your experience with this project, what advice would you give to future organisers of volunteer projects for dental students?

The most important advice would be: Don't get discouraged and don't lose hope! Sometimes, even with the most intensive and detailed planning, something can go wrong. But it is essential to keep an open mind and positive outlook. From my own experience, I understand that to organize an entire event in a city that you don't know or maybe have never even been in, is not an easy task. But! With the help from the locals, everything is possible. What's so great is that EDSA is a community of AMAZING students who are motivated and ready to help. I was extremely lucky to have met such people, without them the projects would never take place. Another kind of advice would be to be prepared for more difficult days (when it just doesn't go so smoothly), a lot of "no's" and not-so-responsive organizations. But, as in the nature of volunteering, many organizations that focus on volunteer work welcome any help so never be afraid to ask!

How has your role as a volunteer officer in organizing this project impacted your perspective or approach towards volunteer work or student initiatives?

My role as a volunteer officer has profoundly shaped my perspective on volunteer work and student initiatives. It's taught me the value of leadership, organization, and teamwork in driving meaningful change. Through coordinating this project, I've learned to appreciate the diverse skills and passions each student-volunteer brings to the table. I now approach volunteer work with a deeper sense of responsibility and empathy, understanding the importance of fostering inclusivity and sustainability in all initiatives. It's a journey of growth that continues to inspire me and I hope the following volunteer projects organized by EDSA will also inspire students to not only volunteer with EDSA but to set start those initiatives in their own home countries



What personal satisfaction or challenges do you anticipate as the President of the Local **Organizing Committee?**

As a co-president, I would say the challenges I face are the lack of the amount of hours in the day! I am also in charge of the instagram page for Strasbourg LOC so at the moment I am fully booked!! However, that said, this is such an enriching experience to learn how to organise an international meeting, to develop my personal skills and to bring the french students even closer to the EDSA community.

74TH EDSA GENERAL **MEETING**

What inspired the decision to host the 74th EDSA General Meeting in Strasbourg?

For anybody who has attended a General Meeting, you will know that the French Delegation is always omnipresent and motivated within EDSA. After attending multiple events, we decided it was our turn to shine, after years of national and local events, on an international level. Strasbourg was the instant choice due to the beauty of the city, the cosy french culture and the access to the European region.

Charlotte Carter

What are the primary objectives or themes for the 74th EDSA **General Meeting?**

Our primary objectives are to share the french culture with our students, show our participants our organisational skills and bring the EDSA community together to have a great time! Oh, and of course, for the themes: French touch! Local cuisine, local cheese wine, pastries everything you can dream



Could you share any initiatives aimed at leaving a positive impact on the host city or its residents?

We will be organising the bi-annual volunteering project with the help of our Volunteer Officer Inès Bouillaud. We hope that this will have a positive impact on the area for the EDSA family to give back to this city. We also hope that we will bring light to the amazing projects and faculty that Strasbourg is.



What legacy does the committee hope to leave after the conclusion of the 74th EDSA **General Meeting?**

We hope that even if it may not be the most posh, most boujee meeting, you will get the feel of french hospitality and culture. We want the vibes to be cosy, inviting and for everyone to feel welcomed. We hope the legacy will be that you had a great summer in the city of Strasbourg!



SWISS DENTAL STUDENT **ASSOCIATION**

Bogomil Saper

UNIVERSITY OF ZURICH, SWITZERLAND

What inspired you to create the SDSA?

Reflecting on it, the initial instance when I considered the absence of a dental students association in Switzerland was during my participation in a convention hosted by the Swiss Medical Students Association (Swimsa). To be honest, I overlooked and disregarded the idea during the demanding schedule of preclinical anatomy, physiology, and biochemistry. Adding to that, I wasn't sure if such an association existed, whether it was inactive, or had already ceased to function. A year after founding the Swiss Dental Students Association (SDSA) I know it did in the 90s.

The subsequent turn of events could be described as being "in the right place at the right time." I received an invitation to a meeting of the Swiss Dental Association (SSO) board, attended by representatives from two other universities. During this meeting, prompted by their inquiry about our absence from the EDSA meetings, I proposed the establishment of a national association. Being at the opportune moment was crucial: I possessed some prior experience with association procedures, had three semesters remaining until graduation - allowing sufficient time to pursue this initiative - and we had the nearunanimous support of everyone involved.

Consequently, the inception of the SDSA was primarily due to luck, but more significantly, our willingness to embrace the risk and opportunity. Further inspiration stemmed from conversations with colleagues, dentists, members of the university, and individuals from EDSA, all aimed at creating an association that would suit the needs of everyone involved.

At this point, I would like to express my sincere gratitude to the exceptional friends I have, both within and beyond the university. They have not only served as a profound source of inspiration but have also been unwavering companions throughout the demanding period of establishing the SDSA. Furthermore, the presence of a passionate and dedicated team within both the Swiss Dental Students Association and EDSA has been a crucial assurance that we are indeed moving in the right direction.



How did you hear about the EDSA?

As mentioned earlier, a fundamental aspect of the initial concept behind establishing the SDSA in collaboration with the Swiss Dental Association (SSO) was to align with EDSA as a nation. This initiative aimed to provide Swiss dental students with the opportunity to engage, deliberate, and exchange ideas with international peers. Therefore, immediately after our establishment on April 1st, we promptly applied for EDSA membership, driven more by an intuitive sense of EDSA's potential than by familiarity with its protocols and initiatives. It's analogous to drilling a tooth: You may know all the theory perfectly and have hundreds of ideas on how to do and improve it; once you undertake it yourself, you see it through different eyes, learning it differently—much faster and with more enjoyment. I believe the Swiss delegation had to catch up with the processes of EDSA, but we were warmly welcomed and integrated rapidly.

What value has EDSA membership brought to the SDSA?

At this point, it is essential to distinguish between two types of values: direct and indirect. Let's begin with the direct value. It is true that the SDSA has not organised numerous events like EVPs, campaigns, or EDSA-affiliated meetings in Switzerland. However, it's necessary to recognise that just a year ago, the SDSA did not even exist. During my presidency, the focus was more on paving the way for future boards to undertake meaningful initiatives for the students. Engaging in EDSA meetings enlightened me about its excellence as an organisation, compelling me to envision expanding our collaboration, perhaps through exchange programs or similar endeavors.

However, the more crucial aspect in the initial months was the indirect value of EDSA. I'm referring to how past boards successfully connected with our dental association (SSO), indirectly catalysing the establishment of the SDSA. Joining EDSA within three weeks of our inception provided the SDSA with an initial commitment, giving it a purpose to exist and preventing it from failing within a few weeks. Additionally, numerous discussions emerged that sparked ideas for the SDSA's development.





How do you feel students will remember your term as national delegate?

I consider it essential to highlight the significance of the "EDSA delegates," a small yet highly dedicated group comprising association presidents and individuals striving for change within EDSA and thus the European dentistry world. I resonate with these qualities, finding it incredibly inspiring to interact and connect with like-minded individuals who share similar interests and visions. The memories of my time with the EDSA community will undoubtedly endure, as I forged lasting friendships there. So, in response to the question, "memories of a (hopefully) likable Swiss guy" will be the answer, at least.

Yes, founding an association from the ground upholds a certain value in people's eyes. This experience was unique to me because it required making decisions on every little detail, that sometimes were fixed over time or by tradition in other associations. Due to my capability to develop projects from inception, I received invitations to join the EDSA board on numerous occasions. However, last year, I had to respectfully decline these offers, disappointing those who held me in high regard. Yet, I believe it was the right choice, considering that the association I led at the time wasn't sufficiently stable for me to resign or reduce my leadership. I consistently adhere to the principle: if you embark on something, do it wholeheartedly—whether it's managing a multimillion-dollar business, a part-time job, or leisure time. I hope people recognise this dedication in me.

SLOVAK ASSOCIATION OF DENTAL **STUDENTS**

JESSENIUS FACULTY OF MEDICINE IN MARTIN, COMENIUS UNIVERSITY BRATISLAVA, SLOVAKIA

What inspired you to take on the role of President of the Slovak Association of Dental Students?

Navigating through various roles within our association, it has been a significant journey for me since the beginning of my university studies. It all began when I assumed the position of chairman at the local organization within our faculty. Subsequently, I decided to elevate my involvement by taking on the role of general secretary at the national level. Despite having some hesitation, I contemplated aiming for the presidency. However, the unwavering support from my close friends, coupled with encouragement from influential figures like Katarína Vendeľová, former president and EDSA Prevention Officer, propelled me forward.

Long discussions with Katarína stand out in my memory, as they played a pivotal role in shaping both of our careers within the Slovak Association of Dental Students. The guidance and encouragement received during those conversations have left a memorable mark on my journey within the association.



What are your goals during your term as President?

I aspire to effectively organize activities with a longstanding history, ensuring their success and continuity. Additionally, I aim to foster connections among individuals through our various activities, promoting collaboration and synergy within our community.

Furthermore, I am passionate about gaining a deeper understanding of the challenges faced by students and advocating for their needs to university representatives. By actively listening to students and amplifying their voices, I strive to contribute to a supportive and inclusive academic environment where all individuals can thrive and succeed.



What are the main issues students face today, and how do you hope to better them?

In my view, our current focus needs to be on tackling the most critical aspect of education. My colleagues and I have identified a significant deficiency in dental school education concerning oral hygiene, including proper brushing techniques and the use of daily hygienic products. It's unfortunate that dental students aren't being instructed on how to brush their teeth effectively. Without this fundamental knowledge, how can we effectively educate and train our future patients?

Encouragingly, the majority of students recognize this gap in the curriculum. Currently, we are initiating discussions within student circles to brainstorm potential solutions. Once we've formulated a general idea, it's essential to present it to the faculty representatives for further consideration and action.

How do you balance the demands of your role with your personal life?

I'm certain my family and friends would describe my time-management skills as "very poor." Recently, I've come to realize that I struggle with managing my time effectively and setting personal priorities. I often find myself getting caught up in work related to our association, using it as a coping mechanism to avoid addressing my responsibilities towards my studies, relationships, and health.

I'm still not sure whether I'm making unnecessary sacrifices for my role within the association or if I'm simply taking on more than I can realistically handle. This uncertainty has prompted me to reflect on my habits and seek ways to better balance my commitments and responsibilities.





Are there any figures in the dental world or other fields who have inspired your approach to your work?

Currently, as I am halfway through my studies, I actively seek diverse insights and approaches from various sources. I'm intentionally avoiding fixating on just one figure as an idol, instead preferring to gather inspiration from a wide range of sources.

In terms of personal growth, my admiration has always leaned towards individuals who surpass ordinary standards and undertake extraordinary endeavours. I've been particularly fascinated by those who excel beyond expectations while still managing to fulfill their everyday responsibilities, whether as professionals or students.

However, a reality check came when I realized that many of the remarkable accomplishments don't always reveal the sacrifices made. It became evident that behind the bright facade of achievement, there often lies a trail of unseen sacrifices and challenges that are not readily apparent. This realization prompted me to reassess my definition of success and to acknowledge the importance of balance and well-being amidst the pursuit of goals.



SUMMER INTERNSHIP ATHARVARD UNIVERSITY

School of dental medicine

Zaraffussain

QUEEN'S UNIVERSITY BELFAST, UNITED KINGDOM

What were the main areas of focus during your internship?

The program's well-organised structure allowed us to delve into various aspects of oral health research while actively engaging in our research project. We were privileged to attend seminars featuring presentations by accomplished Forsyth scientists and dentists, experts in oral health research, immunology, microbiology, and public health. These sessions not only encouraged open discussions but also offered valuable insights into the diverse career paths within these professions.

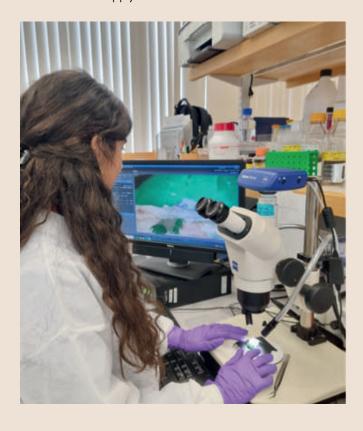
Our active contribution to a research project aligned with Forsyth's ongoing animal study on mice was a highlight. Forsyth researchers are internationally recognised for their ground-breaking work on non-invasive and sustainable immunological interventions for addressing periodontitis. The hands-on experience included a smallscale independent research project focused on evaluating the treatment of alveolar bone loss caused by periodontitis, utilising specialised pro-resolving molecules (SPMs). This animal clinical study involved working with 114 mice, providing a practical understanding of the study's methodology and gave us the opportunity to use various laboratory equipment, techniques, and specimens commonly employed in extensive research initiatives.

What inspired you to apply for the summer internship at Harvard University School of Dental Medicine?

My motivation for pursuing Dentistry is rooted in a desire to acquire skills that can be applied to aid vulnerable individuals, especially in low-income countries and conflict zones, where oral health needs are dire, and access to dental care is limited. Unfortunately, oral health is often overlooked in healthcare systems, particularly in economically disadvantaged regions.

Throughout my undergraduate degree, I actively sought opportunities to explore dentistry within the context of my broader interests in global health and international development. These experiences highlighted the pivotal role that research plays in improving oral health outcomes and promoting health equity for all individuals. Hence, I wanted to further explore and understand the fundamentals of research and its significance in the realm of oral health.

In my pursuit, I researched summer research opportunities, ultimately leading me to the Forsyth Undergraduate Dental Summer Program. Globally recognized and affiliated with the Harvard School of Dental Medicine, Forsyth has been a pioneer in numerous breakthroughs in oral health. Recognizing this as a dream opportunity, I couldn't pass up the chance to apply.



What were the most significant things you learned during your internship?

Undoubtedly, this program has been a transformative experience for me. Before participating, my understanding of dentistry and the world of research was quite limited. However, in the span of four weeks, learning from inspiring individuals and having the privilege to work in a laboratory on an animal clinical study broadened my perspectives, revealing numerous avenues and pathways to explore in pursuit of my goals and interests

Forsyth, as an institution, stands as a genuine source of inspiration and a testament to hard work. Collaborating with individuals from diverse backgrounds, all propelled by a shared passion to make a meaningful difference, was both inspiring and an incredible learning experience. Witnessing the humility displayed by these individuals, despite their remarkable achievements, played a significant role in fostering my appreciation for remaining humble and seizing every opportunity to learn from others.

Understanding various research fields and their significance in dentistry for enhancing patient care has been a key takeaway. This experience helped me recognise the interdisciplinary nature of research and how I can integrate and collaborate with my other areas of interest within dentistry to contribute to making a meaningful impact.



Did you have the opportunity to network with other dental students or professionals during your internship?

The international undergraduate dental summer program I participated in brought together 11 students from diverse corners of the globe, including countries like Turkey, Mexico, Brazil, and Bolivia. Collaborating with dental students from such varied backgrounds resulted in a rich cultural exchange and, more importantly, the formation of lasting friendships. Over the four weeks, our group became a tight-knit family, creating cherished memories and providing unwavering support to one another.

Our interactions went beyond cultural exchange. Learning about the personal journeys of these dental students and witnessing their passion for dentistry was truly inspiring and motivating. The diversity of experiences shared during this program broadened my perspective on the global landscape of dentistry.

Additionally, the opportunity to collaborate with postdoctoral researchers and dentists specialising in various fields provided valuable insights into their career trajectories in academia and research. This experience has equipped me with a profound understanding of potential pathways I can pursue to engage in research. I am confident that the network of support established during this program will prove immensely valuable in the future, facilitating access to research opportunities and fostering continued professional growth



How has this internship influenced your career aspirations as a dentist?

This internship has significantly shaped my career aspirations as a dentist. Initially, my understanding of research and its relevance to oral health was limited. However, this experience has highlighted the pivotal role that research plays in healthcare, particularly in addressing disparities and fostering greater equity.

Witnessing first-hand the transformative impact that research can have on improving oral health outcomes has been a powerful motivator. It has inspired me to pursue an academic foundation training program next year, providing an opportunity to simultaneously engage in both work and research. This step aligns with my goal to contribute actively to advancements in oral health through a research-oriented approach.

While I already have specific areas of interest, such as public health and the refugee crisis, I am excited to explore the various existing avenues in research. The prospect of discovering new possibilities and contributing to the advancement of knowledge in various areas is both intriguing and exhilarating. This internship has not only broadened my understanding of dentistry but has also fuelled my passion for research and its potential to drive positive change in oral healthcare.



VICE PRESIDENT OF **EXTERNAL AFFAIRS**

Ivan Denyanov MEDICAL UNIVERSITY OF PLOVDIV. BULGARIA

Can you describe your role as the Vice President of External Affairs within the European Dental Students Association?

In the dynamic realm of the European Dental Students Association (EDSA), my role as the Vice President of External Affairs (VPEx) is akin to being the chief architect of flourishing connections. The core of my mission is to forge and fortify relationships between EDSA and our esteemed partners and stakeholders. It's not just about attending routine meetings; it's about charting unexplored territories and orchestrating collaborative projects that reverberate with innovation and leave an indelible impact.

In essence, I am the catalyst for discovering fresh opportunities that transcend the ordinary, paving the way for groundbreaking partnerships. The thrill of navigating the complexities of external relations is a constant driving force, pushing me to seek avenues that elevate EDSA to new heights of influence and excellence.

Could you elaborate on the types of external stakeholders you interact with regularly on behalf of the association?

Picture a vibrant tapestry woven with threads of connection that stretch across diverse landscapes. In my role as VPEx, I regularly engage with an eclectic mix of external stakeholders, each contributing a unique hue to the rich mosaic of partnerships. From student associations and specialty organisations to professional bodies and official dental entities, the spectrum is electrifyingly diverse.

Navigating this dynamic network allows EDSA to offer our members a kaleidoscope of opportunities. It's about tapping into the vast reservoir of potential that these partnerships present, ensuring that our members not only receive exposure to various facets of dentistry but also gain access to thrilling avenues that spark their professional growth.

What are the association's future plans or goals regarding external partnerships or collaborations?

Hold on to your seats because EDSA is embarking on an exhilarating adventure, brimming with initiatives that promise to redefine the landscape of external partnerships. Currently, we're immersed in the excitement of a mobility project with AfroDSA, a venture that transcends geographical boundaries to enrich the experiences of

But that's not all. We're actively forging partnerships with heavyweights in the dental arena, including EAPD, EPA, and EADPH. The sparks are flying as we delve into discussions with EADD, exploring the vast potential of collaboration. And, brace yourselves for the inaugural edition of the EHSAS Summer University in Braga, Portugal - an event that promises to be a beacon of transformative learning and networking.



In what ways has your role as Vice President of External Affairs contributed to your personal and professional growth?

Serving as the VPEx has been nothing short of a riveting rollercoaster, propelling my personal and professional growth to unprecedented heights. At its core, this journey has been a masterclass in networking and communication - skills honed through navigating the intricacies of external relationships.

Beyond the theoretical, it's about experiencing the world. I've traveled to new countries, immersing myself in diverse cultures and broadening my horizons. The exposure to the decision-making processes within the EU bubble has been illuminating, providing insights that transcend the boundaries of conventional learning.

The real magic lies in the people I've encountered - captivating individuals who have left an indelible mark on my perspective. Each interaction has been a chapter in a fascinating story of personal and professional enrichment.

How do you balance your responsibilities in external affairs with other commitments, such as academics or personal life?

The secret to this high-energy balancing act lies in consistency. Every day, after the world settles down, I devote an electrifying hour to EDSA work. It's a deliberate choice, a commitment to nurturing the thriving ecosystem of external relations.

My schedule is a meticulously crafted symphony, planned at least a month in advance. Productivity apps like Trello and Google Calendar are my companions, keeping the rhythm alive and ensuring that no note is out of place. Yet, the real alchemy happens with the unwavering support from the EDSA team and the Board of Directors. In this collective powerhouse, we synchronize efforts, ensuring that we not only meet our commitments but soar to new heights. It's the assurance that, whenever needed, the EDSA family has my back - a support system that transforms challenges into opportunities and ensures that the journey remains a thrilling ascent.

EUROPEAN ASSOCIATION OF DENTAL PUBLIC HEALTH ANNUAL CONGRESS

VILNIUS UNIVERSITY, LITHUANIA

Can you give us an overview of the European Association of Dental Public Health Annual Congress, particularly its focus on sustainability in dentistry?

From September 14th to 16th, I had the privilege of representing the European Dental Students' Association (EDSA) at the annual congress hosted by The European Association of Dental Public Health (EADPH). The event titled "Sustainability in Dentistry - A Multifaceted Approach" addressed critical public health issues, focusing on universal healthcare and its sustainability. The congress served as an insightful platform for discussing emerging trends and advancements in dental public health and ways of minimising the environmental footprint of dental practices while advancing oral health. Renowned keynote speakers explored the nexus between health and sustainable practices, highlighting their profound implications for oral health delivery. Discussions also centred on the importance of green education and sustainable clinical practices, emphasising economic sustainability and the role of public and private finances. The event's culmination was a thought-provoking panel discussion, echoing the theme of the congress itself. Overall, the EADPH Annual Congress provided an indispensable forum for dental professionals, including students like myself, to deepen our understanding of and contribute to the sustainable evolution of dentistry. It emphasises the importance of aligning oral health practices with broader environmental care and social responsibility goals.



What steps can dental students and young professionals take to contribute to sustainable practices in their future careers?

Today, dental students and young professionals have access to numerous opportunities, leading them to contribute to sustainability. It all begins with understanding dentistry's environmental impact and the necessity of making environmentally conscious decisions. Awareness of the environmental implications of dental materials and procedures is inevitable for informed decision-making. Reducing waste generation involves choosing reusable alternatives, minimising disposable materials, and ensuring proper waste segregation and recycling. Implementing a technology-based approach to dentistry would include prioritising energy-efficient practices such as LED lighting and water-saving fixtures, exploring renewable energy sources, and transitioning to electronic health records, digital imaging systems, and online communication platforms. Promoting preventive measures through patient education and early intervention reduces the demand for resource-intensive treatments, benefiting patients and the environment. Active engagement with local communities, including outreach programs and awareness campaigns, amplifies the impact of sustainable oral healthcare practices. Staying updated on sustainable dentistry advancements and integrating best practices into clinical workflows are fundamental. By seeking professional development opportunities and collaborating with peers to implement innovative solutions, young specialists further drive sustainability in the dental profession and environmental and public health goals.

How has attending this congress influenced your perspective or approach to sustainability in dentistry?

Attending this congress has profoundly influenced my perspective and approach to environmental responsibility within dentistry. Firstly, it provided exposure to cutting-edge research, technologies, and best practices aimed at mitigating the environmental impact of dental practices. Discovering sustainable dental materials, energy-efficient equipment, and effective waste management strategies has motivated me to prioritise eco-friendly options in my future clinical practice. Interacting with experts in the field offered invaluable insights and practical guidance on integrating sustainability into dental education and practice. Collaborating with like-minded professionals created a sense of community. It encouraged the implementation of sustainable initiatives within dental schools and clinics. Engaging in discussions and workshops on ethical considerations, social responsibility, and the broader implications of sustainability in dentistry has deepened my understanding of the essential connection between oral health and environmental responsibilities. It has prompted critical reflection on the ecological consequences of conventional dental practices and once again brought up the urgency of adopting more sustainable alternatives. Overall, I am beyond grateful to have participated in this event as this experience has deepened my knowledge and skills. The congress made me develop a profound sense of responsibility and dedication to prioritising environmentally conscious practices throughout my career as a dental professional.

EDSA AT IADS MID-YEAR MEETIN







UNIVERSITY OF PLOVDIV, BUI GARIA

The International Association of Dental Students was established in 1951 with the aim of fostering international collaboration and communication between dental students and organizations worldwide. Its mission is to facilitate the exchange of knowledge and experience about dentistry at a global level.

IADS has always been an important partner association of EDSA since its very beginning. In 2009, it reached another level when the EDSA Spring meeting in Ljubljana, Slovenia, was a joint meeting with IADS.

The collaboration between our organisation and the International Association of Dental Students (IADS) has continued over the years. Recently, the EDSA Board members were invited to attend the IADS Mid-Year Meeting in Monastir, Tunisia. As a prevention officer and a member of the board, I was happy to participate in this event. It provided an excellent opportunity to see how their association works in person and exchange some ideas about future collaborations.

MONASTIR

The Mid-Year Meeting took place from February 18th to 23rd, 2024, in the beautiful city of Monastir. Since my arrival in Tunisia, both the LOC and the Executive Committee were incredibly friendly and welcoming, and they made me feel right at home.

The IADS General Assembly took place over the first two days. During this time, essential topics such as the Ex-Co reports and future projects were discussed and voted on. At the end of the second day, I had the pleasure of representing EDSA and giving a presentation about our organisation and its projects. This led to a productive discussion with IADS delegates, during which I was able to answer their questions and provide them with more information about our work.

EDSA also invited IADS President Dr. Lamis Elsheikh to attend our 73rd EDSA Meeting in Bucharest so that the EDSA delegates could find out more about the International Association of Dental Students and their projects.

Over the next few days, a scientific program was organised, which included an interesting lecture and training session with Assoc. Prof. Elham Kateeb, Chair of FDI Public Health Committee and President of IADR, Palestinian Section. The training session focused on "Capacity Building on Tobacco Cessation for dental teams: how to deliver brief advice about tobacco cessation to your patient". The entire scientific program was well-organized, with lectures and workshops covering various fields of dentistry.

Every evening, a social program was organised to give participants an opportunity to immerse themselves not only in Tunisian culture, but also in the cultures of other attending countries, through their cuisines and music.

In our free time, we had the opportunity to explore Monastir, a beautiful city,learn about its history and have

The experience at the IADS Mid-Year Meeting was outstanding for me. During the meeting, I not only got the chance to make new connections and discuss future projects together, but also had the opportunity to meet many wonderful people from all around the world. I created friendships that will last a lifetime.

Thank you, IADS people, for the event! Thank you, EDSA Board, for the opportunity!





UNIVERSITY OF ZAGREB, CROATIA

WHAT IS THE UIA?

The Union of International Associations (UIA) is a non-profit organization based in Brussels, Belgium. It is a research institute and documentation centre focusing on international organizations and associations. The UIA collects, compiles, and provides information on various governmental and non-governmental international organizations, as well as their meetings, events, and publications.

Every year in November, they organise a Round Table that provides an opportunity to learn through networking and practice, meet other international associations, and share experience and knowledge to help you run your organization better.

Representing EDSA as a Training Officer, I participated in their Round Table held in November 2023. As one of only three student associations present, EDSA had the chance to present itself among over 120 internationally recognised organisations.

The UIA's primary objective is to promote understanding and cooperation among international associations. It maintains a comprehensive database of global civil society organisations, offering a valuable resource for researchers, policymakers, and anyone interested in the landscape of international organisations.

WHAT DISCUSSIONS DID YOU HAVE AT THEIR MEETINGS?

The entire day was highly productive, marked by a series of engaging and fruitful workshops and conversations. Meaningful discussions permeated every aspect of the day, contributing to a positive and collaborative atmosphere. I had the opportunity to participate in several captivating workshops amid many exciting sessions. Specifically, I had the privilege of attending the following workshops: "Expanding the outreach and capacity of your association's community – how to reach out to sponsors and funders" held by Frédéric Destrebecq (Executive Director, European Brain Foundation / European Brain Centre), "Empowering the Next Generation: How to Make Your Association Youth-Friendly" by Juan Simoes Iglesias (Secretary General, YMCA Europe) & Olga Lukina (Executive Secretary for Movement Strengthening and Strategy, YMCA Europe), "Event sustainability – 10 small changes that will inspire" by Virginie De Visscher (Executive Director – Business Events, Destinations Canada) and "Time for a Membership Strategy Health Check" held by Chloé Menhinick (Association & Legacy Advisor). The discussions proved to be incredibly inspiring, fostering a wealth of innovative ideas and collaborative solutions. The exchange of ideas sparked a vibrant atmosphere, paving the way for innovative solutions and inspiring contributions from all participants.

DO YOU FEEL THAT THERE WILL BE FUTURE COLLABORATIONS WITH UIA?

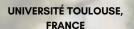
Firstly, I want to thank the UIA Board for the invitation and the excellent hospitality extended to us in Brussels. It was a privilege to participate in an event that was meticulously organized with a high level of professionalism. Certainly, UIA stands as a valuable institution, presenting ample chances for both learning and hands-on application.

Overall, the sessions were a source of inspiration, resulting in a rich and productive dialogue that left participants motivated and eager for future engagements. As the Union of International Associations plays a crucial role in documenting and facilitating access to information about international organizations, we aim to further collaborate with them. We are enthusiastic about the prospect of collaboration and eager to deepen our involvement in the initiative.





MILES FOR SMILES: EDSA X CLEFT



Tres Bouilland and Joshua Kennedy

QUEEN'S UNIVERSITY BELFAST. UNITED KINGDOM

In the spirit of unity and impactful collaboration, the EDSA has embarked on a transformative journey with CLEFT, a charity committed to sustainable improvements in cleft care both in the United Kingdom (UK) and overseas. This partnership is not just a testament to shared values but also an opportunity for dental students across Europe to actively contribute to positive change.

Cleft lip and palate, affecting 1 in 700 babies in Europe(1), present profound challenges for children as they grow. The need for multiple surgeries, ongoing tests, and therapeutic interventions can significantly impact not only physical appearance but also speech, hearing, and dental development. CLEFT's holistic approach addresses these challenges, supporting a variety of projects aimed at improving the lives of individuals born with clefts.

CLEFT's commitment to understanding the causes and improving treatment outcomes is reflected in its sponsorship of research projects in the UK.(2) Simultaneously, projects in other countries aim to provide long-term treatment and care for those less privileged. By investing in research projects studying the cause and treatment of clefts, CLEFT remains dedicated to unravelling the mysteries surrounding this condition.

As part of their collaborative efforts, EDSA has chosen to align with CLEFT through the 'Miles for Smiles' campaign. Taking place from May 1st to May 31st 2024, this initiative encourages students from across Europe to engage in physical activities while spreading awareness of this charitable cause. Through platforms like Strava, students can record the distance they cover, fostering a sense of community and shared purpose.

Last year, 56 participants joined the campaign, and this year's goal is to surpass that number. By scanning the provided QR code, students can easily get involved, making a tangible impact while promoting the significance of oral health.

Joshua Kennedy, EDSA Vice President of Public Relations, shares his experience: "I ran the Berlin Marathon in September 2023 to raise funds for CLEFT. The support I received was immense, and I felt proud to contribute to something bigger than myself. I encourage all students to get involved where possible."

The collaboration between EDSA and CLEFT provides a unique platform for dental students to actively engage in philanthropy, advocacy, and community building. The 'Miles for Smiles' campaign exemplifies the power of collective action, encouraging students to contribute not only through physical activities but also by spreading awareness of the importance of cleft care.

As EDSA and CLEFT join forces in their commitment to making a positive impact, dental students across Europe have an opportunity to be part of something greater than their academic pursuits. The 'Miles for Smiles' campaign serves as a tangible expression of solidarity, reminding us all that small steps can lead to significant changes. By participating in this initiative, students can contribute to the improvement of cleft care, fostering a sense of community and shared responsibility for the well-being of those affected by cleft conditions.

Scan for references



THE VALUE OF A NATIONAL ASSOCIATION

Aoife Lordan

QUEEN'S UNIVERSITY BELFAST, UNITED KINGDOM



How has your experience as a university representative on the BDSA Council influenced your perspective on the dental profession and education?

Sitting on the BDSA as a BDA rep for my university, Queen's University Belfast, has been an invaluable experience. The BDSA is run by elected students and is in charge of the social aspect of UK dental student life. The BDA is the trade union and professional association for both dental students and dentists in the UK since 1880.

Two representatives elected from each of the UK dental schools sit on the BDSA committee. Allowing an opportunity for BDA reps to advocate on behalf of other students, influence national policy and delve into the world of networking. Sitting on the BDSA council for the October 2023 meeting, it highlighted to me the role that students can play in speaking up about education and dental politics. The BDSA council has also allowed me to meet dental students from universities across the UK, allowing us to compare experiences. As the BDA works closely with the UK government, this meeting provided an opportunity for the students representing each university to voice their opinions. For example, we discussed the government's latest plans for National Health Service (NHS) dentistry and the possibility of a 'tie-in' system.

Educational needs were also addressed, students had the opportunity to highlight any areas for concern and the BDA representatives discussed with us issues surrounding the national recruitment. In recent years interviewing for graduate jobs has been replaced with a 'Situational Judgment Test' (SJT), students are ranked using this test and placed in their initial dental job after university.

The BDSA also helps to facilitate career development and leadership among BDA members. Currently, they are in the second year of running their 'Future Leaders Programme' offering successfully accepted applicants the chance to gain knowledge in governance, policy and research, education, PR, and media. I have thoroughly enjoyed taking part in this programme, and have honed in on many skills.



How do you see the national events organised by the BDSA, such as the academic competition, conference, sports day, contributing to the overall experience and development of dental students?

Work life balance is a particularly important aspect of dental student life. The BDSA offers both social and academic opportunities for students throughout the 16 UK dental schools. There are over 5,500 dental students in the UK, an important part of the BDSA is community. Bringing dental students together for the two annual social events, the conference and sports day, provides a time for students to unwind and have fun while also networking and making connections with other dental students.

The conference allows students to meet with various dental professionals from all over the world offering an insight into various career paths. This year there were talks about whole mouth rehabilitation, endodontics, anterior composites as well as motivational speakers. Students attend a trade fair with a variety of companies and brands from the dental industry, offering samples and information to students. The conference concluded this year with a boat party on the river Thames in London and a 'The Greatest Showman' ball.

Annually, a selected dental school hosts the BDSA sports day weekend, an opportunity for students to come together and unwind after the busy exam period. This promotes health and well-being among peers through physical activity, teamwork, discipline, and resilience.

All these events come together to help promote a healthy work-life balance amidst the demands of dental education.

From your perspective, what are the key challenges and opportunities that dental students face, and how does the BDSA address or support these issues?

There are a plethora of challenges that can face students throughout their dental education. Dentistry itself is a demanding degree, managing clinical time and skills alongside the theory. As a BDA member, students have access to 'the most comprehensive dental library in Europe.' With up to 5 years of university, expenses can become challenging for many students. The BDSA works closely in conjunction with the BDA on this matter, offering the BDA Benevolent fund to help struggling students with advice about all options available to financially help students through dental school.

The BDA also provides advice on dental foundation training (DFT), as national recruitment processes frequently change and update. Currently applicants in England, Wales and Northern Ireland take a 'Situational Judgement Test' (SJT), the BDA offers advice to universities regarding this process. Dr Andrea Ogden, the BDA undergraduate and career development lead, hosts a podcast dedicated to helping dental students navigate their career options as well as visiting universities to offer SJT guidance.

Throughout dental school many opportunities arise for students to enter academic competitions, the BDSA offers the annual research summit. Designed to be a competition that is manageable alongside dental school studies, students submit abstracts to be reviewed by academics esteemed in research. The winning students' work is published in the BDJ student magazine and awarded iTop training with Curaden in Portugal, as well as a surf camp in Peniche. This is an excellent opportunity for students to explore the world of dental research and future career options. Students can further develop their critical-thinking, analytic skills, and scientific literacy.

How do you envision the future role and influence of the BDSA in shaping the landscape of dental education and practice in the UK?

The BDSA endeavours to include students from across the UK in events by raising awareness and listening to the concerns of dental students nationwide. The BDSA continues to receive representation from all UK dental schools, to ensure that the future UK dental practitioners are at the heart of BDA decision and policy.

Currently in the UK there is an air of uncertainty surrounding the future of NHS dentistry, the BDA are campaigning tirelessly for safe and fair working conditions for dentists to provide appropriate care for patients across the UK. Bi-annual conferences of dental students and BDA board members are imperative to ensure we as future dentists have a say in the world we will be working in.



Can you share a bit about your backgrounds and what inspired you both to pursue a career in dentistry? ~Priya & Orla

My name is Orla O'Brien, I'm a fourth-year dental student at the University of Dundee and am currently the Junior BDSA rep for Dundee. I'm terrible at the "tell me about yourself" question and so I asked my family to describe me in a couple of words and they came up with outgoing and easy going. In my free time I love to horse ride and meet up with friends. Originally, from Dublin in Ireland, I was initially quite sceptical about moving to Dundee as I didn't know anyone in Scotland never mind the UK. However, Dundee has been described as a "big village" where everyone knows everyone and so it wasn't long till bumping into people at Tesco's meant you spent longer chatting than doing the food shop! Hence, I can safely say that moving to Scotland has been the best decision I've ever made.

At school I was never the person who always knew exactly what they wanted to do, however having over twenty first cousins and seeing & hearing about their line of work, meant I had a fair idea of what I didn't want to do!

Therefore, I'm quite grateful for my own personal dental experiences as it was ultimately this that inspired me to pursue a career in dentistry. At thirteen, I learned I had an impacted canine and as a result I experienced first-hand the variety of disciplines within dentistry, how teamwork orientated the career is and simply the impact being able to transform someone's smile can have on them. All these things greatly appealed to me, and so along with the fact that none of my cousins had chosen Dentistry as a career to put me off, I applied to Dentistry in Dundee and thankfully it has all worked out.

I am Priya, a fourth-year Dental Student at the University of Dundee. When I am not in the Dental School, I enjoy keeping active and spending time dancing on the ice rink. I love traveling and embarking on new adventures, where I will probably be armed with my camera as I enjoy capturing memories and special moments, photography has a special place in my heart! My personal experience of having underwent orthodontic treatment as a child changed my life and fuelled my desire to pursue a profession in Dentistry. Growing up, I quickly realised and appreciated the impact Dentistry had on my own self-esteem and quality of life; having secured a place in Dental School, I look forward to a future of continuous growth and learning, in a very rewarding profession, where I can offer my support, share my enthusiasm, and enhance the lives of others, just as mine was.

THE VALUE OF A DENTAL SOCIETY

Orfa O'Brien & Priya Purewal

UNIVERSITY OF DUNDEE, UNITED KINGDOM

As a member of the Dundee Dental Students Society, could you tell me about the activities it operates, particularly during Mouth Cancer Awareness Week? ~Priya

Our Student's Society here at Dundee offer a range of activities and events, which are inclusive to all students within the Dental School. The society hosts both educational and social events throughout the year, allowing students to integrate and further enhance their learning and University experience, our School is ranked highly for student satisfaction, and as a Society, we aim to help the Dental School maintain this. Some of our recent events have fundraised for amazing causes such as "Let's Talk About Mouth Cancer Awareness," and "The Canmore Trust," the Society has also previously raised funds to provide dental supplies to homeless people in Dundee.

The Canmore Trust is a Mental Health and Suicide Prevention charity; to raise awareness for this amazing charity, the Society have organised a 5km parkrun and talk with the founder of the Canmore Trust. We have been raising money through donations from the Dundee Dental Students and Staff who have been participating in the Couch to 5k program as well as generous funding from the BDSA to facilitate the running of the 5km park run, all proceeds will go towards The Canmore Trust

In aid of Mouth Cancer Awareness week, the Society held informative stalls on the main University campus, which allowed the public to learn more about Oral Cancer. The Society also hosted a fundraising Acoustic Night, where students from our dental school show off their talents which raised an outstanding £2360 for Let's Talk About Mouth Cancer.

How does the BDSA facilitate connections between the Dundee Dental Student Society and other dental student societies in the UK? $\tilde{}$ Orla

Dundee Dental Student Society plays a vital role in why our dental school is a very close-knit community. It oversees the social aspect of student life and as Priya explained it provides an opportunity for students to get to know each other on a more personal level outside of clinical settings.

As great as it is that we are all so close at Dundee it would be naive to think that the people we are at Uni with will be the same people we will be working with for the rest of our careers. However, the probability of working alongside someone who is at Uni during the same 5 years as you, in one of the sixteen dental schools across the UK is more likely and therefore, the events run by the BDSA such as the conference and sports day allows you to create these connections with fellow students from all dental schools and network in a unique way.

On a more personal level, the BDSA has helped us enhance our connections with our fellow Scottish Unis by providing funding through the Douglas Jackson Grant and enabling us to host our event "Couch to 5K" in aid of the Canmore Trust which we are completing alongside Aberdeen & Glasgow. It has created friendly competition between us but more importantly strengthened our relationships.

In your role as a university representative for the BDSA, what does the national association mean to you, and what opportunities has it provided in your dental education journey? *Orla

I am very grateful to be the BDSA representative for Dundee and feel very fortunate that I am in a position where I can avail of all the opportunities the role offers. It means a lot to me to be part of this association as I've found just being in the company of others and being part of a community bigger than my own dental school to be invaluable. I believe you can always learn something from someone else and so having students from all backgrounds and walks of life working together encourages debate and subsequently allows one to make better decisions.

Despite only being in the role as BDSA rep for a short time, the impact it has had on my dental education from both a personal and professional point of view has already proven massive. I am currently taking part in the Future Leaders Programme, put on by the BDA, which provides a unique opportunity to learn more about the inner workings of our trade union and professional membership organisation which has subsequently broadened my horizons of what a career in dentistry can look like.

Finally, I believe that one of the greatest experiences the BDSA has provided me is still to come. By being part of the BDSA I've been able to learn more and get involved in other associations such as the EDSA. I am really looking forward to Bucharest and hope the unique opportunity to represent the UK at the 73rd EDSA meeting will provide me with skills and memories that will stay with me throughout my career in dentistry.

EDSA RESEARCH OFFICER

Marija Divkovic
UNIVERSITY OF BELGRADE, SERBIA

Could you describe your background and experience in research?

My journey in science started at an early age, when I got my first microscope at age of 6. It continued in High School during my stay at Research Center Petnica, where I've been focused on genetics. It was a curiosity which kept me inspired through many different topics, from basic science, through material investigations to clinical research. Oral cancers caught my interest the most, which is why I decided to continue that research during PhD studies. Knowing the answers on "How" and "Why" we make clinical decisions is immensely important in order to become a better doctor.

In your opinion, why is research significant within the context of a dental student association, and how do you plan to emphasize its importance during your time as Research Officer?

Our students are future clinicians who will use different protocols, guidelines, therapeutic agents and dental equipment. Science and research are representing pillars of clinical practice, which is why we must support objectively and critically thinking among young colleagues. Main goal would be to inspire more students to be involved in Research Competition and Scientific Rewards, but also to provide them adequate skills through some new projects, where there will be more opportunity to share knowledge on a multinational scale.

What do you consider the most pressing research areas or topics within dentistry, and how do you plan to address them or encourage exploration among association members?

While spending time in different clinics, I realised that the heaviest burden is carried out by patients who suffer from oral cancers. Cancers represent emerging public health problem, which should be addressed through prevention campaigns, early diagnosis and regular screening. I use every opportunity to emphasise this topic, through my research, by supporting our prevention and volunteering team, by making informative posts for raising awareness. Through making new contacts with other European Associations which are researching oral cancers, I am trying to build opportunities for new surveys and potential projects, such as podcasts or conference participation.

Could you outline a potential project or initiative you'd like to launch during your tenure as the research officer? What outcomes do you hope to achieve through this project?

Primary, that would be preparing candidates for Research Competition through online training. For those who are interested in gaining more skills in science, there is a new project – Research Summer Camp. Students will have the opportunity to develop basic scientific skills through lectures, training and workshops. Through the Camp they will learn more about abstract writing, literature review, statistical analysis, ethics and critical thinking. Idea of this project is to bring science closer to students and to enable them to gain skills, connections and friendships without boundaries.



A GLIMPSE INTO BIOMINERALIZATION DYNAMICS AND CONTEMPORARY REMINERALIZATION AGENT

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-yça G BEZMIÄLEM VAKIF UNIVERSITY, TÜRKIYE

> A complex mineral-biomacromolecule balance ensures the healthy integrity of the organic-inorganic tissue of our teeth and bone tissue. This balance consists of three fundamental biological mechanisms: biomineralization, demineralization, and remineralization. Ensuring a balance between biomineralization and demineralization is required to maintain the integrity of healthy dental tissue; reversal of demineralization and promotion of remineralization are also vital. Biomineralization is a dynamic, intricate, and lifelong process in which living organisms regulate the precipitation of inorganic nanocrystals inside organic matrices to generate distinct hybrid biological tissues. [1] Simply put, it is defined as how living organisms secrete inorganic materials in an organised manner. [2] It is the process by which inorganic solids develop, take on structure, and provide living systems with certain characteristics. This is accomplished by carefully removing and absorbing components from the surrounding environment, then incorporating them into functional structures while maintaining strict biologic control. In an effort for this biomineralization process to take place, specific ionic characteristics and an appropriate crystalline size are required for the physiologically regulated process of biologic apatite production. Bone and teeth are well-known examples of biomaterials that have distinct biomechanical characteristics that are essential to their function. Enamel, dentin, cementum, and bone biomineralization include the deposition of apatite mineral crystals within an organic matrix. Recognising the process of biomineralization in dental tissues is critical for the development of new procedure approaches, especially for minimally invasive caries management, as well as for the production and development of biomaterials.

The Role of Saliva in Enamel Health and Remineralization

Saliva is a key component in caries risk assessment as well as treatment selection because it is a critical biological and protective factor in the remineralization of enamel. Studies on the development of tooth decay indicate that enamel can begin to dissolve at pH 5.5 and below and dentin at pH 6.7. [3] At that point, saliva's protective role stands out as what is known as the saliva's "buffer capacity" which helps to maintain a balanced pH in the oral cavity that is directly related to the rate and extent of tooth demineralization. The salivary buffering capacity involves three major buffer systems: the bicarbonate (HCO3), the phosphate (PO4), and the protein buffer systems. These systems have different pH ranges for maximal buffer capacity. [4] Salivary pH is approximately neutral, and buffering agents, such as inorganic phosphate in resting saliva and the carbonic acid-bicarbonate system in stimulated saliva, help maintain neutrality. [5] Its buffering capacity can contribute to the ion exchanges during re-mineralization and demineralization of enamel, with supersaturation of calcium and phosphate at pH 7 and in the presence of fluoride. Therefore, physical and chemical changes in saliva composition, and particularly changes in its buffering capability, play an important role in the development and progression of caries. [6]

The Role of pH in Demineralization and Remineralization

Dental caries is a multifactorial disease caused by the interaction of dietary sugars, dental biofilm, and the dental tissue of the host. It results from repeated cycles of demineralization and remineralization at the interface of the biofilm and the tooth surface. [7] Demineralization is the process of removing mineral ions from hydroxyapatite crystals in the hard tissues of teeth, such as enamel, dentin, and cementum. The most stable form of hydroxyapatite exists in an environment with a pH of 7.4. The pH level is a significant consideration in tooth erosion discussions, but it's not frequently among the most critical ones. Direct acidic assault routes are well documented and have been seen widely. There is a constant chemical equilibrium between the hydroxyapatite in the enamel (Ca10(PO4)6(OH)2) and the dissolved hydroxyapatite in the plaque biofilm. Mineral crystal dissolution takes place when the pH level of the plaque falls below 5.5. [8,9] When the minerals are dissolved, the intercrystalline space expands, and the surface of the enamel becomes softer and more porous, leading to the formation of caries. [9] However, if remineralization mechanisms are activated at this point, this situation can be reversed. Remineralization occurs as a process of restoring minerals in the form of mineral ions to the hydroxyapatite latticework structure, although the process is much slower than enamel demineralization. The prevention and treatment of demineralization, which can be avoided or reversed, particularly in its initial phases, are covered in this section. Remineralization is a natural repair process for non-cavitated lesions that utilises calcium and phosphate ions to construct a new surface on existing crystal remnants in subsurface lesions that remain after demineralization. [7] Effective caries management and prevention depend on the delicate balance between remineralization and demineralization and on knowledge of the demineralization and remineralization processes.

Products Effective in Enamel Remineralization and Their Method of Action

There is a global consensus that the principal approach to modern-day caries management should be to "preserve the tooth structure and restore only when necessary". New remineralization systems that either regenerate lesion body structure or provide ions favouring subsurface mineral gain (e.g. calcium phosphate systems) can significantly reduce the need for traditional restorations and preserve tooth structure. [10] The gold standard for effective remineralization continues to be agents designed to increase the availability of calcium, phosphate, and fluoride at the right time and at the right pH. Products containing these compounds have been proven to work clinically. For this purpose, current remineralization agents are: fluoride, silver diamine fluoride, ACP (amorphous calcium phosphate), tricalcium phosphate (TCP), nano-hydroxyapatite (nHa), xylitol, and sodium bicarbonate.

For decades , fluoride has been the most common remineralization agent. The dramatic decline in caries prevalence rates of developed countries from the latter half of the 20th century has been largely attributed to the widespread use of oral care products containing fluoride . [11] It remains the gold standard for arresting caries lesions with multiple systematic reviews confirming the role of fluoride products in preventing dental caries. [12]

The role of fluoride in preventing and arresting caries is that fluoride ions return minerals back that are released from the tooth surface and facilitate the growth of new fluorapatite. [13,14] When acid attacks tooth structure, mineral content is gradually lost to the cariogenic biofilm beneath it. The inset biomechanism of dental caries development demonstrates that tooth loss is not a continuous process. Instead, mineral loss (demineralization) alternates with remineralization. The fluoride acts on the enamel in several ways. In the first mechanism, fluorapatite crystals have greater resistance to acid attack than hydroxyapatite crystals, which inhibits demineralization. Second, the combination of calcium and phosphate ions promotes remineralization by accelerating the formation of new fluorapatite crystals. It inhibits acid-producing carious bacteria by interfering with the synthesis of phosphoenolpyruvate, a crucial intermediate in the glycolytic pathway of bacteria. In addition, fluoride adheres to oral hard tissue, oral mucosa, and dental plaque, thereby preventing demineralization and promoting remineralization. Combining silver's antibacterial and antimicrobial properties with fluoride and ammonia creates an effective preventive agent. [15]

Calcium phosphate-based remineralization technologies are promising adjuncts in the management of incipient caries lesions. [16] Casein phosphopeptide-amorphous calcium phosphate (CPP-ACP) is a bioactive material derived from the milk protein casein that increases calcium and phosphate bioavailability. In basic terms, CPP stabilizes ACP. [17] In dental plaque, clusters of ACP are formed through the combination of CPP with calcium phosphate. [16,14] This milk protein acts as a reservoir to precipitate these minerals onto the tooth surface. [18,14,19] This results in a supersaturated enamel that resists demineralization and improves remineralization. [14] Additionally, CPP-ACP inhibits bacterial adhesion to the tooth surface, thus slowing plaque formation. [20] Furthermore, through the production of ammonia, the breakdown of the CPP buffers the oral environment by raising the oral pH. Tricalcium phosphate (TCP) is a compound that accelerates enamel fluoride uptake. [21,22,23] When TCP contacts a saliva-moistened tooth surface, it is believed the protective barrier breaks down, which results in the availability of calcium, phosphate, and fluoride ions. [21,22] In vitro and in situ studies show that TCP products improve remineralization and enhance anticaries action.

Nanotechnology is emerging as one of the most revolutionary approaches to developing nanoscale materials. [24] In recent years, researchers have focused on nanotechnology because of the dramatic change in material properties at the nanoscale due to the larger surface-to-volume ratio. [25] Due to its biocompatibility and function as the main component of the body's hard tissues, principally bone and teeth, hydroxyapatite (HA) has emerged as one of the most widely researched biomaterials in medicine and dentistry. Since HA is a potent supplier of calcium and phosphate, it can assist in remineralizing areas of demineralized enamel in cases when carious lesions are at the initial stage. Reports have shown that HA has excellent potential for repairing and regenerating tooth enamel. [26] However, because of its porous nature, HA has poor mechanical characteristics. When compared with normal HA, nano-hydroxyapatite (nHA) has some exceptional properties like superior solubility, increased surface energy, and better biocompatibility. Nanohydroxyapatite acts as filler because it repairs small holes and depressions on the enamel surface, a function enhanced by the small size of the particles that compose it. [27] It also has a larger reaction surface due to its small size and has excellent bioactivity properties when compared to larger crystals. [28] In terms of shape and crystal structure, the nanoparticles are identical to the apatite crystals in tooth enamel.[26] Nano-hydroxyapatite is, in fact, a better source of free Ca, and this is a key element in regards to remineralization, and protection against caries and dental erosion. Besides, nanohydroxyapatite has a strong ability to bond with proteins and with fragments of plaque and bacteria when contained in toothpaste. This ability is due to fragments of plaque and bacteria increasing the surface area to which proteins can bind. Concerning restorative and preventive fields, nano-hydroxyapatite has remarkable remineralizing effects on initial lesions of enamel, certainly higher than traditional fluorides used until now for this purpose. [27] Thus, it seems sensible to anticipate a rise in interest in this ground-breaking material and an increase in the number of scholarly publications on the topic in the years that lie ahead.



Conclusion

Several remineralizing agents have been utilized to precisely inhibit and remineralize enamel and initial-stage caries lesions, widely known as white spot lesions. An improved understanding of biomineralization dynamics in dental tissues highlighted that remineralization of enamel plays a key role in minimally invasive restorative dentistry. Modern dentistry focuses on non-cavitated caries lesions that may be managed non-operatively using remineralization to avoid disease development and enhance aesthetics, strength, and function. Fluoride has been the cornerstone of enamel remineralization for decades. In order to retain enamel integrity and prevent the formation of cavitated caries, new remineralization agents are being developed. According to the findings, non-cavitated lesions can be remineralized using appropriate technology, including non-fluoride remineralization procedures. As oral health experts, every dental team member should strive to stay up-todate on the remineralization agents that are available for clinical guidance and practice adoption as oral health experts. Such minimally invasive remineralization measures are obviously necessary in contemporary dentistry, not only to enhance clinical outcomes but also to elevate patient experience and overall well-being.

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The Use and Construction of Athletic Dental Mouth Guards:

In the dynamic world of sports, the emphasis on safety extends beyond physical conditioning and training techniques. Protecting athletes from potential dental injuries is a crucial aspect, and one of the primary tools in achieving this goal is the athletic dental mouth guard. This small but mighty device plays a significant role in preventing dental trauma, enhancing performance, and ensuring the overall well-being of athletes across various sports.

Understanding the Importance:

Dental injuries are not uncommon in sports, ranging from minor chips and fractures to more severe damage such as tooth displacement or avulsion. Athletic dental mouth guards act as a resilient barrier, absorbing and redistributing impact forces that could otherwise result in serious oral injuries. They provide a protective cushion for the teeth, gums, and surrounding structures, reducing the risk of damage during high-impact activities

Construction and Types:

Athletic dental mouth guards are typically constructed from durable, flexible materials such as ethylene-vinyl acetate (EVA). These materials are chosen for their ability to absorb and disperse impact energy while maintaining a comfortable fit for the athlete. The construction process involves heat molding the material to the athlete's teeth, ensuring a secure and customized fit.

There are three main types of athletic dental mouth guards:

- 1. Stock MouthGuards: These are pre-formed, ready-to-wear mouth guards that come in various sizes but lack customisation. While readily available, they may not provide an optimal fit and comfort for every athlete.
- 2. Boil and Bite Mouth Guards: These guards offer a better fit than stock options as they can be molded to an individual's teeth. Athletes achieve this custom fit by immersing the mouth guard in hot water and then biting into it, allowing it to adapt to the shape of their teeth.
- 3. Custom-Fitted Mouth Guards: Considered the gold standard, custom-fitted mouth guards are created by dental professionals. They involve taking impressions of the athlete's teeth to craft a personalized guard that offers superior comfort, protection, and adherence.

Benefits Beyond Protection:

Athletic dental mouth guards not only shield against dental injuries but also offer additional benefits. They may help reduce the risk of concussions by absorbing impact forces transmitted through the jaw. Furthermore, these guards can enhance breathing and communication during sports activities, contributing to improved performance and overall athlete experience.

Maintenance and Care:

Proper maintenance is crucial for the longevity and effectiveness of athletic dental mouth guards. Athletes should rinse their mouth guards with cool water after each use, avoid exposing them to extreme temperatures, and store them in ventilated containers to prevent bacterial growth. Brush the mouth guard gently with a toothbrush and mild soap, then rinse thoroughly. Avoid using hot water or abrasive cleaners as they can damage the material.

Mouth guards for orthodontic treatment

Orthodontic treatment, such as braces or aligners, aims to straighten and align the teeth to improve dental health and aesthetics. However, these appliances can be vulnerable to damage during physical activities or accidents. Mouth guards are essential for protecting orthodontic appliances, preventing breakage or dislodgement. Custom-made mouth guards can be designed to accommodate the braces or aligners, ensuring a proper fit and optimal protection. By using mouth guards during orthodontic treatment, patients can maintain the integrity of their appliances and avoid additional dental issues.

In conclusion, athletic dental mouth guards are essential tools in preserving the oral health and well-being of athletes. From construction techniques to the variety of available options, these guards provide a vital layer of protection, allowing athletes to focus on their game without compromising their smiles. Whether at the amateur or professional level, the utilisation of well-fitted athletic dental mouth guards underscores a commitment to safety in sports.

To this day, burning mouth syndrome or BMS, is a condition which is poorly understood by the dental and medical profession, with varying definitions, theoretical aetiologies and pathophysiologies attempting to mitigate the devastating patient experience. In this short crash course, we're diving into the essentials of what is currently understood about this perplexing condition.

Spicy Symptoms

In the wider scope of oral medicine, a number of conditions, both local and systemic, may cause a burning sensation in the mouth otherwise referred to as glossodynia (1–3). Examples include oral mucosal conditions, parafunctional habits, trauma, xerostomia, systemic factors such as auto-immune conditions exemplified by mucous membrane pemphigoid amongst others (4,5). By definition, none of these typical causes are present in burning mouth syndrome.

Moreover, there is no prevalent cause in burning mouth syndrome, a chronic neuropathic condition which is diagnosed through excluding the aforementioned causes (5,6). Beyond exclusion, diagnostic criteria (which varies across the literature) includes daily recurrence for >2 hours per day for >3 months, while the pain is of a burning quality and felt superficially in the oral mucosa (7).

As a syndrome, a constellation of symptoms are present in cases of burning mouth syndrome, namely (1,3,7,8):

- Oral mucosa and salivary flow rate are normal
- Burning sensation is moderate to severe for the past four to six months
- Presents with associated tingling or numbness and xerostomia (sensation of dryness)
- Typically bilateral and symmetrical
- · Present for the majority of the day
- Improvement on eating and drinking
- No sleep interference
- Reduced taste intensity and a bitter/metallic taste in most cases
- · Most common in the anterior part of the tongue, labial mucosa and palate

Although salivary flow tends to be normal, it presents with differing IgA levels and increased viscosity (9). In addition, extraoral dryness is a notable extraoral manifestation of BMS (10).

Crudely, symptoms can be generally described as the searing pain of spicy food for hours on end.

Treating the Torment

Indeed, a vacuum of understanding is the fundamental challenge behind burning mouth syndrome. To tackle this, the varying prevalence is consulted in an attempt to understand the essential features of the condition, working backwards to understand the cause.

Specifically, the epidemiology of burning mouth syndrome is very well understood, affecting 1-7% of the adult population depending on the sample (7,11). Furthermore, females are up to 7 times more predisposed than males, especially in peri– and post–menopausal stages while age offers a strong association for both sexes especially above the age of 50 (7,11).

Theories behind the pathophysiology of the neuropathy include the disruption of central neurogenic pathways, psychogenic pathways and direct peripheral nerve fibre neuropathy – all of which may be related to one another (1,5,12,13).

The triggers, or the aetiology of the condition suggest a multifactorial nature. Suggested causes include (3,6,8,12-14):

- Systemic
- o Fluctuating oestrogen levels
- o Type 2 diabetes mellitus and associated peripheral nerve neuropathy
- o Neuropsychiatric conditions (major depressive disorder, anxiety)
- o.Pharmacological ACE inhibitors (increased bradykinin), retrovirals, levothyroxine and topiramate
- o Gastric reflux disease
- o Hypothyroidism
- Local
 - Preceding oral infection (Candida spp., Enterobacter spp., Fusispirochetal spp., Helicobacter spp., Klebsiella spp.)
 - Contact dermatitis via dental irritants (mercury, amalgam, methyl methacrylate, cobalt chloride, zinc, benzoyl peroxide)
 - Contact dermatitis via food allergies (peanuts, sorbic acid, chestnuts, cinnamon)

BMS may be described as primary BMS (neuropathy, no underlying medical problem) and secondary BMS (secondary to medical conditions) (7,14).

Burning Mouth Syndrome



Finding the Fuel

Bearing in mind the diagnosis by exclusion and the number of associated aetiologies, a detailed history paired with oral examination is the most essential tool for any clinician encountering this condition (2,15,16). Correspondingly, asking the right questions will help rule out atypical facial pain, atypical odontalgia, trigeminal neuralgia, post-surgical nerve trauma and other conditions (2,15,16).

Beyond the rudimentary examination, the literature also suggests ruling out the possibility of an underlying psychiatric conditions and therefore decently probing about the psychological well-being of the patient concerned, performing a neurological examination and working with the general practitioner to systemically rule out possible causes of the burning mouth syndrome using the appropriate tests (3,6,12,13).

Apart from taking oral cultures, performing allergy patch tests and ruling out other conditions, it is important to note that the idea of performing a biopsy on these patients is somewhat disputed (5,6). Considering the little information gained, such as a reduced density of peripheral nerve endings at most against the trauma and pain caused, the benefits of taking a biopsy [U16] in such cases are extremely limited. Moreover, considering a lack of oral lesions, it's unclear as to which site exactly should receive a biopsy.

A Poor Quality of Life

Patients suffering from burning mouth syndrome are typically under a lot of emotional distress due to the pathological pain, compounded by the psychological purgatory of multiple clinicians failing to understand the patient and failing to provide answers (1,16).

Indeed, a long history of recurrent pain or failed treatments together with the aforementioned epidemiology implores a careful approach from the clinician. In addition, BMS patients present with significantly poor health-related quality of life (HRQL) and oral health-related quality of life (OHRQL) (10,16).

Specifically, as early as possible, clinicians should offer the explanation behind BMS, demonstrating empathy towards the patient's situation and offering some understanding.

Managing a Case of BMS

That, of course, brings us to the treatment and management of this poorly understood condition. Modalities of treatment, after first ruling out local triggers such as sharp food and teeth and changing to an SLS-free toothpaste, include topical and systemic medications, ranging from scientific to experimental (2,6,15,17,18):

- Topical medications capsaicin (masking and desensitizing the burning), clonazepam (medicinal tranquilizer), unconventional agents (mouth rinse with tabasco sauce/hot pepper + water, alive vera gel)
- Systemic medications capsaicin, clonazepam, tricyclic antidepressants, antipsychotic drugs, hormone replacement therapy, phytotherapics, photobiomodulation therapy, alpha-lipoic acid

Clinically, it seems that approaches vary from desensitizing the burning, tranquilizing the nervous response or targeting a systemic cause with varying evidence supporting each approach.

Currently, the literature suggests clonazepam (topical application over system use) as the best approach to reducing the pain of BMS compared to a placebo against other modalities (17,18). In addition, placebo therapy has also been suggested to improve BMS symptoms (3,18).

In addition, behavioural modulation is supported as a leading approach to managing burning mouth syndrome, being the least invasive while helping patients manage the pain rather than trying to eliminate it completely. Namely, cognitive-behavioural therapy is definitely worth considering (3,4,15).

Of note, new modalities such as low-level laser therapy are also being considered - more novel innovations are expected over the years as understanding of the condition improves.

When it comes to managing the prognosis of a case of burning mouth syndrome, cases may be limited to a transient burning which passes with time or may extend to symptoms which cease to resolve (7,11). To reiterate, a lack of understanding of pathophysiology extends to the prognosis.

A Summary of BMS

Burning mouth syndrome is an elusive condition, offering up a clinical challenge even to the experienced clinician due to the arduous journey required to arrive at the diagnosis by exclusion exacerbated by treating patients with a significantly impacted quality of life while consulting varying treatment methods to manage an

Moreover, clinicians are tasked with consulting a constantly changing evidence base.



Special thanks goes to Dr Maria Luisa Gainza Cirauqui and Dr Joanna Basic for their invaluable and essential guidance.





We refer to temporomandibular disorders (TMD) as a set of muscular, temporomandibular joint (TMJ), and surrounding structure alterations that are associated with pain, clicking, and limited mouth opening. As expected, individuals suffering from these types of disorders experience a decline in their quality of life, leading to increased anxiety, a higher likelihood of developing depression, and affecting sleep quality. In terms of prevalence, various studies indicate that between 5% and 12% of the population suffer from this condition, being more common among women of childbearing age, making it the second most prevalent musculoskeletal disorder. Various therapies have been proposed to improve the clinical condition of patients with this problem, including the use of non-steroidal anti-inflammatory drugs, physiotherapy, surgical procedures, and also intra-articular injections, which will be the focus of this article. (1)

TMJ & TMD

Firstly, it is important to understand what the TMJ (temporomandibular joint) is and how it functions in order to comprehend how we can intervene in cases of its disorders. The TMJ is a bilateral joint that connects the jaw to the temporal bone and is responsible for functions such as chewing, speech, and facial expression. It consists of three bony components: the mandibular condyle, the articular tubercle, and the mandibular fossa of the temporal bone. Between these structures, there is a fibrocartilaginous and avascular articular disc, along with synovial fluid that facilitates the nourishment and lubrication of these components. Associated with this joint are the muscles of mastication, which, in conjunction with the joint, enable the performance of the functions mentioned earlier.(1)

TMD can be divided into muscular or intra-articular dysfunctions. The most common clinical manifestations are pain, limitation of mouth opening, muscle or joint tenderness upon palpation, changes in mandibular movements, joint sounds, and otologic complaints such as tinnitus or vertigo. (1)

What kinds of treatment do we have for TMD?

In an attempt to control the pain resulting from these dysfunctions, different approaches have been proposed, ranging from more conservative ones such as pharmacotherapy, physiotherapy, or occlusal splints, followed by minimally invasive approaches with infiltrations using sodium hyaluronate, corticosteroids, non-steroidal anti-inflammatory drugs, to more invasive ones such as arthroscopy, arthroplasty, arthrotomy, etc., which should only be applied as a last resort. (1)



In what cases are the intra-articular injections indicated? Cases with indications for the use of intra-articular injections as treatment involve temporomandibular joint dysfunction of articular origin: articular disc displacement of the TMJ with and without reduction, osteoarthritis, degenerative joint disease.(2)

Osteoarthritis and osteoarthrosis are degenerative processes that lead to arthralgia: pain in the joint. What happens here is a deterioration of the joint tissue where degradation products are released into the synovial fluid because there is cellular replication with the release of a matrix, enzymes, protease inhibitors, and cytokines.(2)

In disc displacement, the articular disc detaches from its anatomical position in relation to the condyle and articular tubercle of the temporal bone. During mandibular movement, if there is a clicking sound, it means that the disc has returned to its anatomical position, and in this case, we have a disc displacement with reduction. If this does not occur, the disc did not return, and we have a disc displacement without reduction.(2)

What type of substance do we use?

Infiltrations in the temporomandibular joint (TMJ) with corticosteroids were introduced in 1953 by Horton in patients who did not respond to more conservative treatments. They show good results in reducing joint pain. The corticosteroids most commonly used are hydrocortisone, prednisolone, and betamethasone. In some cases, they may have adverse effects such as the progression of pre-existing pathology, and therefore, an analgesic is usually associated to try to diminish these

Hyaluronic acid (HA) can also be used in order to reduce joint pain. It is a glycosaminoglycan constituent of synovial fluid that plays a crucial role in temporomandibular joint (TMJ) lubrication. It is synthesized by synovial B cells. The high viscoelasticity of synovial fluid is maintained by the high molecular weight of HA, preventing the formation of granulation tissue and intra-articular adhesion. The question arises whether HA acts solely in a mechanical manner as a viscosity supplement or if it also plays a role in inflammatory mediators during the osteoarthritis phase. (2)

Platelet-rich Plasma (PRP) obtained by peripheral venous puncture is another possible approach, containing a high concentration of platelets that play a crucial role in tissue repair and regeneration, as well as in the control of inflammation and immune response through the induction of chondrocyte proliferation and chondrogenic mesenchymal stem cells (regenerative properties) and induce the reduction of the effects of pro-inflammatory cytokines as well as induces an increase in intra articular levels of hyaluronic acid. This product is obtained by centrifugation of the patient's autologous blood and has anti-inflammatory, analgesic, and antibacterial properties. The major advantage over the use of corticosteroids is the lack of serious adverse effects.(3)

So now how do we do it?

This technique is frequently applied to the upper compartment of the temporomandibular joint due to its good anatomical landmarks and minimal risks.(3,4)

To determine the injection point, a line should be drawn from the tragus to the lateral canthus. Measure 10 mm medial to the tragus and 2 mm below the line (posterior region of the upper compartment). The needle should be inserted in a posterior-to-anterior direction at a 45° angle, with only 10 mm of the needle entering the upper compartment of the temporomandibular joint.(3,4)

Several studies indicate that this therapeutic measure can lead to a significant reduction in joint pain as well as improve other symptoms such as limited mouth opening. PRP and HA are the ones that have shown the best results; however, it is always important for new studies to emerge in order to enhance this treatment.(3,4)

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Reformation Charity

KING'S COLLEGE LONDON
UNITED KINGDOM

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Can you provide an overview of Reformation Charity and its mission?

Poverty destroys millions of lives every day. Here at Reformation Charity, we aspire to create change by providing for the less fortunate and rebuilding as many lives as possible. Driven to help those in need, Reformation charity is passionate about delivering aid through an inclusive approach towards all, irrespective of religion, race, gender, age or ethnicity.

Our success stems from packaging and distributing care packages to aid those suffering on the streets of London whilst also working alongside our trusted partners to spread funds internationally as well as nationally. Taking part in these projects enables us to reach out to many families, personally engage with them and transform lives for the better.

We are committed to providing an efficient, effective service to ensure your donations reach those in need. Together, we can alleviate the impact of poverty, empower the poor, and create a fairer world for everyone, both nationally and internationally.

Are there specific student-led programs or initiatives within Reformation Charity that European dental students can join or contribute to?

Our organisation actively involves dental students in our charity campaigns, providing them with opportunities to contribute and simultaneously foster the development of empathy. By participating in these campaigns, dental students gain practical experience, engage with diverse communities, and contribute to reformation efforts. This hands-on involvement serves as a meaningful avenue for building empathy as students witness first-hand the impact of their contributions on the individuals and communities they aim to support.

In our commitment to promoting overall well-being, we prioritise oral hygiene in our care packages distributed to people experiencing homelessness. Recognising oral health's role in overall health, we include essential items, such as toothpaste and toothbrushes, in these packages. By addressing this fundamental aspect of personal care, we aim to enhance hygiene and contribute to the broader health and dignity of individuals experiencing homelessness.

Reformation charity is currently involved in building medical and dental colleges in Tanzania. These initiatives aim to provide educational opportunities for individuals in the region, allowing them to learn and contribute to the healthcare field. The construction of these colleges is part of our broader commitment to reformation and empowerment through education.

Can you share examples of how the charity's work has impacted communities globally, including within Europe?

The charity's impactful work has left a global footprint, fostering positive change in the lives of many individuals and communities. In Tanzania, the construction of medical and dental colleges reflects our commitment to education and healthcare, providing essential training and support to dental and medical students. This initiative empowers individuals and contributes to the rejuvenation of communities.

Our efforts in feeding programs for children in Afghanistan, Ethiopia, Malawi, Sudan, Pakistan, Iraq, and Bangladesh address a crucial need. By providing food for vulnerable children, we go beyond meeting immediate needs, laying the foundation for improved educational outcomes and personal growth.

We extend past just visible contributions. We aim to bring all volunteers together, embracing diversity to promote a united community. We stress the value of collaborative efforts, working together for a lasting and meaningful impact. This inclusive approach amplifies our reach, ensuring our charitable efforts leave a lasting and positive legacy in every community we serve.



Are there upcoming projects or campaigns for Reformation Charity?

Reformation charity is currently preparing for a range of exciting upcoming projects dedicated to fostering a positive impact in the communities we serve. From our ongoing monthly arts and crafts sessions for refugee children to our upcoming charity dinner to raise funds to support orphan villages in Iraq, each project is designed to contribute meaningfully to the well-being of those in need. We're also in the process of organising more homeless drives for the near future. Our unwavering commitment to addressing the immediate needs of the homeless population is emphasised through these drives. Through these initiatives, we aim to provide essential resources and support to those facing homelessness, ensuring that they receive the care and assistance needed for improved well-being. As we eagerly anticipate these upcoming endeavours, we are driven by the belief that each initiative will play a vital role in promoting positive transformations and uplifting the lives of individuals across diverse backgrounds.

