WE CAN NEVER BE A JACK OF ALL TRades SO FOCUS ON ONE FIELD AND DO IT IN THE BEST WAY POSSIBLE

GABRIELA RUEDA
SPECIALIST IN ORTHODONTICS AND MAXILLOFACIAL ORTHOPEDICS
Dear IADS Family,

Welcome to IADS Magazine NOVEMBER 2018 Issue!

I am very excited to share with you our new magazine issue which has a few changes since last term! First of all, don’t rush to read it, just take a quick look at the following pages and you will notice our changed design. For this I want to say big thanks to coordinator of graphic design - Mohamed Fayed who helped me to fulfill my ideas in the best possible way! After quick review of design, I suggest start paying more attention to the articles and read them carefully. We have invited social media celebrity orthodontist Dr. Gabriela Rueda from Mexico for IADS Español section which was combined with IADS Stories, so the interview could be available in both languages Spanish and English. Also, for the first time IADS Magazine has included professional research - study article! In IADS Research section you could read more about effervescent vitamin C effect on resin composite. I want to thank Aws Salah - coordinator of IADS Magazine who was managing work among writers and Zeinab Hussein - coordinator of social media who helped to advertise IADS Magazine in the first place and made it so highly anticipated! Last but not least, liaison officer of editorial board, Silvi Domnori, who coordinated work among the whole team members! Let’s not forget coordinator of video editing - Mark Rizkalla who is working on our secret project that you will hear about soon! So thanks to all these people mentioned above and the rest 22 editorial board members my visions were made reality and you are able to have this brand new IADS Magazine issue in front of you!

Hooray! A fresh and new IADS Magazine is waiting for You. This issue features a little bit of everything - science and volunteering, internal and external, old and new and much more.

Our members are active all over the world bringing forth dentistry and working on numerous fascinating matters. The world is in a constant change and oral health must be kept as a priority within the local, national and international health agendas. The capacity IADS has is immense with trainings, IVP-s, researches, congresses and partnerships happening all the time. Sharing information, writing articles and making interviews is an efficient way how our members can motivate each other and create new opportunities for self-development.

It makes me happy to see how the magazine has grown and developed with more variety being constantly added by the Editorial Board.

So grab a cup of coffee and check out the pages ahead. Enjoy!
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From 25th till 30th of July in the pride of the Mediterranean Sea, there were 19 participants with 5 organizers and 4 lovely trainers, 3 of which IADS Certified Trainers and one IFMSA Egypt Trainer. They all came to the fascinating city of Alexandria to participate in the IADS TNT of Egypt. Participants were from different countries-different culture and cities. There were participants from the land of civilizations Iraq and from the Republic of Sudan. They all came just to get trained and to make new friends in one of the wonderful cities in Egypt. The training took place over a 6-day period and was held at the Faculty of Dentistry in Alexandria. During the first day, participants were trained in different subjects like communication, teamwork, leadership, feedback and presentation skills. The second day of training covered the topics of what the role of a trainer should be, training methods, time management and negotiation skills. The third day was about the place of trainer in dentistry and intercultural training.

This brings us to the fourth day, which was full of social activities. All participants and the team of organizers visited the Royal Jewelry Museum in Alexandria where they got to see the beauty of the ornaments and jewelry exhibited inside and took pictures to seize those memories for a remember it for a lifetime. After the museum, the participants went to one of the biggest sights in Alexandria - the Library of Alexandria. They visited the museum of the library and the library itself. They were very impressed by how colossal and wonderful this place, where you can share the knowledge, meet people from different cultures and develop yourself, is. After the Alexandria Library, participants went to eat had lunch in one of the traditional restaurants and drank tea afterwards.

At the end of this long social day, participants were happy to have spent it sightseeing all these places. On day 5, the sub-regional training (SRT) started. All participants got their topics two days in advance to prepare presentations that they would give in the presence of trainers. On day 6, the SRT was completed and at the end of the day, there was a closing ceremony for the TNT finalized with relaxing in a café at the beach. The participants said the TNT was an amazing experience.
Fayed from Egypt: “Being involved in new experiences, spending 7 days with new people, gaining new skills, having a great time; it was amazing to be in a group with different mentalities, different skills but all with the same passion to learn and make a great impact.”

Mohamed A.M. Ahmed (TNT Egypt Trainer): “The idea of TNT is one of the most successful programs ever done to medical or dental students. Actually, as medical or dental students, sometimes we don’t pay attention to life skills. We spend most of our time on improving ourselves scientifically and clinically. We are very great and professional in that, but the great fact is that we are going to deal with patients, we are going to give lectures, some of us will start a new business; all of these need other skills to be fully qualified. This is what TNT offers us, non-medical skills related to medicine and dentistry. When I decided to leave my own country, Egypt, traveling to attend a TNT program, I wanted to acquire such skills. I had the passion to meet different students from various countries, develop a new way of communication and get inspired by everyone’s story. Here I am today, in love with travelling, giving training sessions, learning more, sharing more, inspiring and getting inspired.”

Aws Salah from Iraq said: “It would be my pleasure to visit Egypt again and to participate in programs like this, because the people of Egypt, the team, the participants and all people that I met in this program were like my second family and I spent memorable days with them. I hope to meet them all in the near future. Big love to IADS family and DSSA-Egypt.”

Ludan Mustafa from Sudan: “TNT was a useful program to learn about communication skills, the art of leadership and how to shape personal features; and we have having met other cultures, the most beautiful moments were brought to me by this excellent team - an experience worthy of praise. I hope to visit Egypt again. I would like to thank everyone who had a role in encouraging me to take this step from friends. Nice to meet all of you and big love to family IADS and DSSA-Egypt.”

Ziad Mekled from Egypt: “These are unforgettable memories; those days we spent together with different nationalities and cultures, in turn redounded on us a kind of cultural openness, in addition to what we learned. TNT is one of the wonderful things the man can do. In the end I would like to thank Sherien Atef, the former president of DSSA EGYPT, for her efforts and keenness to organize this training in a wonderful way and give us the opportunity to attend such a big event like that here in Egypt; and special thanks to my friend Mohamed Ali, who told me about the TNT.”

Characterized by cooperation and a sense of camaraderie, the TNT gives students an opportunity to learn valuable skills outside of the traditional scope of medical and dental education. By participating in TNT, students are able to gain valuable experiences that can enhance their professional development and personal growth.
"Oral diseases affect half of the world’s population and were confirmed to be the most common and preventable Noncommunicable diseases (NCDs) worldwide by the Global Burden of Disease 2016 study." (WHO)

The m-OralHealth workshop held in Montpellier on October 10th-12th brought together around 30 specialists and opinion leaders in oral care and public health, from more than 15 different countries. The event was hosted in the historical medical faculty of the University of Montpellier, as a joint project by the BHBM and WHO Oral Health Department.

The three days were dedicated to the development of a mobile health concept targeting oral health. The “Be He@lthy, Be Mobile” (BHBM) initiative is a collaboration between two UN bodies: the World Health Organization and the International Telecommunications Union (ITU). They are all working on facilitating the implementation process of mobile and digital solutions to help develop healthcare systems globally. The current work in various countries has been based upon SMS messaging to people about preventive, pro-health measures around different areas of importance. mHealth programs have been established to target a number of diseases and risk factors, for example mTobaccoCessation, mDiabetes and mAgeing. The new one to join the mobile initiative is oral health.
The mHealth initiatives have grown and developed over the recent years with more and more areas of healthcare are also picking up on these opportunities. In low- and middle-income settings, where there is a severe lack of health professionals, text messaging is a good way how to send out messages that help to improve the public health behavior of vast communities. The development of an m-OralHealth strategy is work in progress of the WHO Oral Health department. The key components of the m-OralHealth initiative are 1) Literacy 2) Training 3) Early detection and 4) Surveillance. All these listed terms address various sides within the mobile health framework targeting access and education of populations, front-line workers’ training, early detection of diseases such as noma, oral cancers through telemedicine and surveillance of the health situation within population groups.

The workshop itself consisted of a theoretical and a more practical day. On the first day sessions were focused on introducing various ongoing initiatives around telemedicine and mobile health in oral care. In a presentation by Brazil they described how they use telemedicine as means to consult health professionals working in primary care centers in rural communities. In Madagascar and Senegal, SMS-ing around prevention and healthy behaviour is ongoing work with already good results from large population groups. In France, telemedicine is being used in a study at elderly care facilities, where nurses are trained to do oral scans of the residents, that will later on be sent to dentists to evaluate.

The second day we worked in groups on case studies aka personas. Each group focused on several personas with different socio-economic backgrounds. This discussion had the aim of understanding the needs of individuals living in various population groups, when designing something like an m-OralHealth initiative. In order to work out a global strategy, it is important not to forget all the potential receivers of the service. Such discussions and creative thinking are definitely the core element while arranging similar initiatives.

The m-OralHealth agenda is a very good area, where also dental students can work on in their local communities. Several countries are already working on mobile health but not as much on mobile oral health. One of the goals for all of our IADS members would be to find out if their countries are working on any mobile health initiatives and try to also push for oral health to be included. The WHO will be issuing a booklet for m-OralHealth at the beginning of 2019 and from there on it will be continuing work to strengthen the existing framework.
“I believe that every human mind feels pleasure in doing good to another.”
- Thomas Jefferson.

When people who have little access to healthcare come to you and you relieve their pain, you treat them - you change their lives for good! And it feels amazing to see their gratitude and to know that you are helping them expecting nothing in return.

Five years ago, when I just joined IADS, I saw an advertisement for a volunteer program in Jamaica called “Brush Up”. I was just a second-year student back then and I couldn’t join it, but it stuck in my mind and I kept thinking about it ever since then. Next year there was no advertisement and no program, and the next year after, nothing was there! The project disappeared, and people who organized it were nowhere to be found. But I was still thinking on whether there’s a possibility to revive, re-start the project.

Luckily, during the last year FDI Congress in Madrid, I met with two young bright dental students from Jamaica – Ajani Blake and Renae Williams, who were enthusiastic about volunteering and student activities. We sat down and discussed the possibilities of incorporating their freshly formed association into IADS and of course, the possibility of organizing a volunteer project. For many GA’s we discussed that IADS need its “own” projects, organized by dental student associations and not by some other companies or charities. And here it was, the opportunity we could not miss.

Eleven month and many meetings and brainstorms later, I was there, standing in the Montego Bay airport breathing hot and spicy island air and waiting nervously and impatiently to meet my teammates for the upcoming project. We had an amazing team with people from Russia, Finland, Slovenia, Slovakia, Germany, and of course Jamaica. Our hosts and main project organizers – Ajani and Thwin did an exceptional job preparing for the event.

We had everything from everywhere – military mobile compressors from the US Army, mobile units from them as well, portable German military chairs (these were from 1960’, but I bet you wouldn’t find a better one today!), autoclave, all kinds of instruments and equipment.

On Sunday, we went to prepare the place for the project and the guys brought us to... A church! A church in Jamaica is not the same place I’m used to, here in Russia, and it was very surprising to me. A church that is more of a community center rather than just a worshipping place. Many events and projects are hosted by churches there like summer schools and other educational programs, community events and, as it was in our case, a mobile clinic. So, we had all these amazing instruments, qualified international team, two academic supervisors – Dr. Brady and
Dr. Jones, who made sure we wouldn’t kill anyone, we had a support from the church and we decided we were ready. The goal was set to a 100 people per day with extractions, fillings, hygiene and instruction. And we did it! First day it was 117 people and in total we helped more than 500 people during this week!

It was exhausting and difficult at times, but we all could agree that overall it was an amazing experience. We helped many people to relieve their pain, extracted some teeth, educated and taught them proper oral hygiene, gave out brushes and toothpastes, did prophylaxis with fluoride gel and had lots of fun doing all that! Even though it was +35 and we had no AC in the building...

We, in the IADS, believe that dental students, residents and fresh graduates should be more involved in volunteering.

Not only because helping people in need is a very rewarding and noble thing to do, but also because the experience of treating people in a mobile clinic is tremendously valuable.

As we should know that you can’t always rely on the fancy equipment you have, but should rather use what’s available consciously and with the right manual skills.

I want to thank everyone who was involved in organizing this IVP, its promotion, sponsors and other organizations who helped with the project. I am especially thankful to Ajani, Thwin and Renae for the organization; Dr. Irving Mckenzie for the great help and support for the project; Dr. Brady and Dr. Jones for helping and teaching us, Natalia for the ideas and meetings; the ROCS for the dental products and my trip support; Pia, Suvi, Alicia and Frederik, Danilo, Alexandra, Stella, Shelby, Felicia and other volunteers – for their hard work and dedication; and finally, IADS for being a platform where everything is possible and where students can develop themselves as better leaders, clinicians and volunteers.

Finally, I can recommend you, dear reader, to join any upcoming volunteer project and I guarantee that not only will you not regret it, but you will always remember it as one of the best experiences in your life.
Good systems exist in Brazil and Sri Lanka for example, where also dentists are a key element within the primary health care facilities. As (the) representatives of oral health, all IADS members, including me, really need to advocate and work on having oral care acknowledged as an essential factor also within the PHC and UHC agenda. Oral care was not mentioned back in the original declaration from 1978 on Primary Health Care and, unfortunately, it has also not been yet included in the amended Astana declaration. The job for all of us is to work on basic oral care to be also acknowledged and mentioned in documents and discussions on primary health care.

The event itself took place on the 25th - 26th of October in the capital of Kazakhstan - Astana. As mentioned before, the conference also presented a new amendment to the original Alma-Ata declaration from 1978, with an even stronger focus on targeting health systems worldwide to improve coverage with basic healthcare services. But as WHO is working hard this year on including also youth within their work, they organized a separate full day for youth and young
On the 24th of October, WHO and UNICEF, main organizers of the whole event, brought together the Youth Preparatory Workshop. More than 150 students, young specialists in healthcare and other professions were joined together into groups that worked on finding solutions to issues of concern around primary healthcare. Partners of IADS, such as IFMSA and IPSF, were also present with core associations from the WHO Youth Hub being included. We all formed working groups where we shared our experiences and knowledge and brainstormed to find solutions and fresh ideas to the PHC concept. I had a chance to meet young people from not only healthcare but also outside, who were working in NGOs, having start-up companies or strong personal initiatives related to global health and PHC. Some of the key issues we worked on within our teams were: 1) Lack of health workforce in rural areas; 2) Education and training; 3) Interprofessional and multisectoral collaboration; 4) Health policy. I believe that besides being a nice gesture from the main organizers, the youth preparatory workshop was a good platform for widening perspectives around how many different specialties meet together within the realms of Primary Health Care and how wonderful it is to meet with 150 young people who have completely different lives and occupations but all have a united target to achieve better health in the world. The two following days were dedicated to the Astana conference and were also extremely interesting. The sessions comprised of panel discussions that targeted different sides and issues related to PHC, such as finance, interprofessional teams, education and training of health personnel and many more. During the discussions, it was sad for me to once again admit the fact that oral care was not brought up in those discussions. On the other side, this once again proved to me that capacity building among dental students, educational reforms with a more community-based educational system during our undergraduate studies and trainings on health advocacy are essential to also have dentists and oral care professionals speaking and debating on issues such as primary health care. The Almat PHC declaration is amended every 10 years. I would like to stay optimistic and motivated to work these next 10 years to also have basic oral care included in the amendments for the 50th anniversary of this document. It will be a long process that includes changing not only the mentality within the oral care profession, but also the educational systems and training of dentistry. IADS needs to work on a targeted approach on providing means and ways to build capacity and enhance knowledge about global health. This is essential to have a generation of oral health advocates for the future.
FDI World Dental Federation was established in Paris in 1900 as the Fédération Dentaire Internationale and is the world’s leading organization representing the dental profession. International Association of Dental Students (IADS) participated in the 2018 FDI world dental congress which was held in Buenos Aires, Argentina during September 5th – 8th with more than 200 dental associations in attendance.

IADS Representative Pongkarn Kanjanawattana from Thailand (IADS Chairperson of External Relations Committee) had the chance to attend The General Assembly (GA), FDI’s supreme legislative and governing body. Notable outcomes of the proceedings in Buenos Aires included the welcoming of new FDI member associations, elections within FDI’s governance structure, and the adoption of FDI policy statements.

Furthermore, the 2019 FDI World Dental Congress, hosted together with the American Dental Association, will take place in San Francisco, California, from 5th – 8th September 2019. From the GA, the FDI committee discussed worldwide dental problems and came up with 10 new policy statements as stated below:

- Deep dentine caries and restorative care
- Continuing dental medical education in dentistry
- Dental amalgam phase down
- Dentistry and oral health related apps
- Dentistry and sleep-related breathing disorders
- Global periodontal health
- Nanoparticles in dental practice
- Providing basic oral healthcare for displaced persons
- National health policy with the inclusion of oral health
- Promoting oral health through the use of fluoride toothpaste
Join the largest educational network in dentistry!
When Portuguese sailors stumbled across a new piece of land about 180 km off China’s coast in the 16th century, they called it “Ilha Formosa” which means beautiful island. Today we know it as Taiwan and it is still true to its name. It has it all: from magnificent mountains to enchanting beaches, dynamic cities, delicious food and friendly locals. Taiwan Dental Student Association (TDSA) welcomed dental students and dentists from all around the globe from the 27th of August to 2nd of September 2018 to gather for the 65th IADS Annual Congress in Taiwan’s biggest port city Kaohsiung.

The congress started on the 27th August with an opening ceremony, which took place at Kaohsiung Medical University. A charming program was followed by banter between old friends and new faces over delicious food. The venue for the rest of the congress was Ambassador Hotel Kaohsiung with a lovely view over the Love River. In the following days LOC provided us with a stimulating scientific program. Lectures covered the topics of periodontology, endodontics, oral surgery, orthodontics, implantology, esthetic dentistry and public health. Everyone was excited about the skype session with “Singing Dentist”, dr. Milad Shadrooh, who gave us a live performance of one of his songs. We also had a chance to learn new skills in Cerec Asia CAD/CAM, Desmart Radiology, Strauman and Hi-Clearance implants workshops. On the 28th and 29th there was also a dental exhibition, where you could get a souvenir from the congress, if you collected stickers from all the stands. The General Assembly gathered all delegates from member countries, the key event of every IADS congress, on the 29th and 30th for two long sessions. They reviewed association’s work of the previous year. IADS welcomed 8 new members: 3 of them received a full country membership (Japan Dental Students Association, Iraqi Dental Students Association, Portuguese Dental Students Association), 4 of them received a corresponding membership (Latvian Dental Students Association, Association of Dental Medicine Students in Bosnia and Herzegovina, Zimbabwe Dental Students Association, Fiji Dental Students Association in the School of Dentistry and Oral Health at the College of Medicine, Nursing and Health Sciences) and 1 received an affiliate membership (Cambodian Dental Students Association). Delegates voted on the host for the 66th IADS AC, the majority of the votes went to Tunisia. The congress will be held in August 2019 and will be hosted by Tunisian Association of Dental Students. The last but not least part of the GA were elections for the Leadership Board (Executive Committee, Standing Committee Chairpersons and Regional Directors) for the 2018/2019 term.
The social program is an indispensable part of every IADS meeting and LOC made sure we had a good one. The Exchange Fair was the perfect way to relax with tasty food and drinks from all over the world, after some of the participants sat at GA for the most of the day and some of them took part in sightseeing. France won the award for the best performance and Japan won one for the yummiest food. The next night we experienced how to party the Taiwanese way, it was a night out in a fabulous club MUSE Kaohsiung. The last night was Gala dinner and we all dressed up. After an interesting program, it was time to take the last photos and spend some last bittersweet moments with all of us together. The competitive part of the congress included Dental Olympics and Lecture Contest, which both took place on the 31st of August. The contestants at the Olympics had to prove their skills in radiological interpretation, suturing, wire bending, soap carving and root canal treatment. The winning team was from Penang International Dental College in Malaysia, consisting of Lim Yi Yin, Alicia Pui Lai Wong and Goh Wei Horng. The first place for the Lecture Contest went to Araxie Dovlatian from Armenia, who presented a topic on “CAD/CAM All-Ceramic and Ceramic-Like Materials: Mechanical and Esthetic Properties and Clinical Indications”. Regardless of being an industrial city, Kaohsiung is a vibrant place to visit and the rainy weather didn’t stop us from sightseeing. We visited Fo Guang Shan Buddha Museum, most famous for its 40 meters tall Buddha statue. At Lotus Pond, we turned bad luck into good luck by entering through the dragon’s and exiting through the tiger’s mouth of Dragon and Tiger Pagoda. We took a ferry ride to the picturesque Cijin Island and hiked Shoushan – Kaohsiung’s monkey mountain, encountering a great number of Formosan rock macaque, monkey species endemic to the island. A day in Taiwan is not complete without a visit to one of the night markets the city has to offer. Following the smell surrounding countless food stands, we tried plenty of tasty Taiwanese specialties. Heavenly XiaoLongBaos, world famous bubble tea, tempting beef noodle soup just to name a few, and of course stinky tofu, probably the most famous night market dish, for those who could get past its not-so-pleasant smell. Contrary to the rainy and dull weather that was present through the congress, about 40 participants who joined the post-congress trip where delighted with sunshine for the two full days. Our first stop was Sio house (Salt Museum), where you can find salt in the color for every day of the year, and the historical Anping Fort. After a traditional lunch we had a lovely boat ride through the mangrove tree Sicao Green Tunnel, followed by a visit to the beautiful Beimen Crystal Church and breathtaking sunset at Jingzijiao Wapan Salt Field. In the evening we were already starving, so not only we had a delicious seafood dinner, but after arriving to our Dreamer Hotel, the staff welcomed us with oyster BBQ. The next morning the LOC surprised us with kayaking among the oyster-farming floats, which was truly a unique experience, and a visit to the High-Heel Church, a popular wedding venue and a monument for all the women who lost their feet due to the blackfoot disease. Afterwards we boarded the bus, which took us to Tainan, the oldest city in Taiwan and its former capital. There we spent our free time visiting the Confucian Temple, Chihkan Tower and simply enjoying the last moments with people that are more than just friends – the IADS family. Even though the week went by way too fast, it was a wonderful experience that all of us will remember. A huge thank you goes to the LOC and TDSA for organizing this beautiful event and trying their best to make sure everything went smoothly. Looking forward, the French delegation is expecting us for the 65th IADS MYM in March 2019 in Strasbourg. We hope to see you there!
Hi! It’s nice to meet you my dear IADS family!
I’m Shiori Horimoto from the Japan Dental Students Association (JDSA). It is a great pleasure to officially become a part of IADS family and finally introduce my country, Japan.

Our association, JDSA, was established in April 2018. We’re a quite a new association. However, we have 29 dental schools in Japan and dental education here has a long history. Currently, 23 schools are members of our association and now work actively for internal and external activities. As JDSA, we already had our 1st meeting and the 2nd meeting is coming up. We’re planning many activities which are coming up soon.

To introduce Japan, let me begin by talking about a Japanese dental student’s life.

We take 6 years to graduate and need to pass CBT (Computer based Testing) and OSCE (Objective structured clinical examination) to start the clinical studies and in the end of our dental student life we have a national examination, the passing rate of which, is almost 65%.

Our academic year begins in April and ends in March. Moreover, I would like to introduce our extra activities as dental students such as sports festivals, scientific competitions, volunteer programs and study abroad programs.

Let’s talk about how we do. Firstly, I will describe our most unique and most popular activity, which is the sports festival. We have a competition in more than 20 sports between teams from most universities and it takes place once a year during summertime.
It's one of the biggest events of the year. Let's move on to the scientific program. Our biggest difference in curriculum as compared to other countries is that we study basic dentistry and bioscience for 4-5 years and after that we start clinical study, so it means we have many opportunities for research. Therefore, we have a big and historical competition for research and many students are researching to get a chance to experience basic dentistry.

We hope that we can share our researching culture with dental students from all over the world. We also have many experiences in volunteering and exchange fields. We would like to share our experience and be part of a new world with the IADS family. JDSA is super motivated to work with IADS and we want to collaborate with you in many ways, so please don’t hesitate to contact us for new activities!

I hope we can make many memories with dental students from all over the world. Thank you again for accepting us as part of you and see you soon in Strasbourg.
Entrevista con Dra. Gabriela Rueda/
Interview with Dr. Gabriela Rueda

Es difícil afanarse en una esfera en constante evolución como la odontología donde los retos de cada día pueden hacer tu fortuna o tu ruina, donde las exigencias desafían tus límites de lógica y creatividad y lo mejor que uno puede hacer es ser el mejor al resaltar y ser específico para cada caso.

Entonces, les presentamos a una doctora que seguro, les va inspirar a trabajar más y ser la mejor versión de ti mismo. Dra. Gabriela Rueda es una joven empresaria, especialista en Ortodoncia y Ortopedia Maxilofacial, directora de su propia clínica “Clínica Gabriela Rueda Ortodoncia y Estética Dental” en León, México y una sensación en Instagram con su fascinante habilidad en fotografía.

It is difficult to strive in a constantly evolving field like dentistry where everyday challenges can make you rich or break you, where the demand defies your limits of logic and creativity and the best you can do is be the best at being case-specific and sticking out.

Well, let us introduce you to a fellow dental professional who is exactly what you will aspire to be. Dr. Gabriela Rueda is a young businesswoman, specialist in Orthodontics and Maxillofacial Orthopaedics who runs her own dental clinic “Clinica Gabriela Rueda Ortodoncia y Estetica Dental” in Leon, Mexico and is an Instagram sensation with her fascinating photography skills.
1. Que la inspiro a especializarse en Ortodoncia y estética?
Estudiando mi carrera de odontología amaba los cambios radicales y positivos en la sonrisa de mis pacientes, veía como podía influenciar en la autoestima y seguridad de ellos y eso me motivaba. La ortodoncia siempre ha mostrado una ventana la cual podía ofrecer ese cambio en pacientes desde muy temprana edad usando el crecimiento y desarrollo maxilar. Así que a eso me enfoqué.

2. Como fue su propia relación con el ramo de ortodoncia cuando usted era una estudiante de odontología?
Durante mis estudios en odontología todo fue muy enfocado en crecimiento y desarrollo, haciendo bases científicas y visualizando a través de mis profesores la práctica en pacientes.

1. What was that inspired you to specialize in orthodontics and maxillofacial orthopedics?
While studying dentistry I loved radical and positive changes in the smiles of my patients. I would see how it could influence their self-esteem and confidence and that is what motivated me. Dentistry always showed me a window through which I could offer this change to my patients, starting from a very young age, using their own maxillary growth and development. So, I focused on doing this.

2. How was your own relationship with orthodontics when you were a dental student?
During my studies in orthodontics everything was very focused on growth and development, doing scientific bases and visualizing practice on patients through observing my professors.
3. Cual es el caso mas especial que recuerda?

Mi caso mas especial fue iniciando mi practica profesional como ortodoncista, poco después de haber recibido mi titulo. Acudí a mi consulta una paciente que venia de un tratamiento fallido de expiación rápida maxilar y como consecuencia estaba apunto de perder su diente central, tenia perdida excesiva de hueso y movilidad grado III en varias piezas. Para mi fue hasta el día de hoy el mayor reto. Lo consulte con varios de mis tutores y todos coincidían que no debía tomar ese caso pues estaba casi perdido, incluso mis colegas periodoncistas evadieron el tratamiento. Así que, leí y estude mucho sobre formación de hueso a través de movimientos con baja fricción en ortodoncia y este fue el resultado:

Foto: Caso clínico preparado para avance maxilar y retrusión mandibular.

3. What is the most special case you can remember?

My most special case was at the beginning of my professional practice as an orthodontist, shortly after having received my title. A patient came to my clinic with a previously failed rapid palatal expansion (RPE) treatment. As a result, she was at the verge of losing her central tooth, had excessive bone loss and grade 3 mobility in several teeth. To this day, she was my biggest challenge. I consulted various professors of mine and all of them coincided that I shouldn’t undertake this case because it was already lost. Even my periodontist colleagues evaded the treatment. Therefore, I read and studied a lot over the formation of bone via low-friction movements in orthodontics and this was the result:

Picture: Clinical case for RPE and mandibular retrusion
4. **What was that inspired you to share your work on Instagram?**
In a world full of so much misinformation, sharing the knowledge is enhancing.

5. **We think that your dental photography is fascinating. Did you attend any courses on dental photography? If yes, was it before or after your Instagram success?**
Yes, absolutely, I studied dental photography with Dr. Eduardo de Aguiar and Dr. Jesus Oostos. In their course “WHEN THE PICTURES REALLY MATTER”, I changed my perspective on dental photography and the way of showing it. Without being aggressive to the general public while not compromising its professionalism. Thus, converting it in an efficient manner of attracting patients. My success on social media came after I understood these concepts of graphic expression.

6. **What type of brackets do you prefer to use and why?**
There are different indications for the type of brackets. Yet, without doubt, I prefer aesthetic orthodontics, especially on adult patients. My philosophy is ROTH WILLIAMS and I base myself on his prescriptions.
7. Que características cree que son las más importantes para ser dentista famosa y tener éxito?
Mantenerse actualizado es para mí una de las mejores vías para el éxito, no conformarse jamás con el conocimiento y entender las necesidades de cada paciente con bondad y sentido humano.

8. Que consejos podría dar a una estudiante de odontología?
No podemos hacer todo, enfocarse en una sola área y hacerlo lo mejor posible.

Para concluir, Dra. Gabriela Rueda es absolutamente una especialista que hay que tomarse como un ejemplo, seguir trabajando por los sueños y perseguir su pasión. De parte de todo el equipo de IADS, la agradecemos profundamente por esta entrevista encantadora.

Muchas gracias!

To conclude, Dr. Gabriela Rueda is absolutely an example that one should always follow their dreams and pursue their passion. On a behalf, of the whole team of IADS, we thank her profoundly for this enchanting interview.

Thank you!

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What is Regeneration?

Advanced Dentistry

Regeneration is the reproduction of a lost or injured part of the body in such a way that the architecture and function of the lost tissue are completely restored.

Introduction to Periodontal Tissue Regeneration:

Detachment of the junctional epithelium from the tooth surface (the formation of a periodontal pocket), disconnection of periodontal ligament fiber attachment to the root surface via cementum, and bone loss, are hallmarks of periodontitis. The aim of regenerative periodontal therapy is to restore the structure and function of the periodontium through formation of new attachment of junctional epithelium to the tooth surface and of connective tissue fibers to the root surface. Research has provided evidence that in most situations chronic periodontal diseases can be treated. There is also evidence that periodontally involved teeth have a good chance of survival, provided that therapy, patient compliance and maintenance care are appropriate. There is a broad range of treatment options available, but only a few may be regarded as truly regenerative procedures.

According to a position paper from the American Academy of Periodontology, periodontal regenerative procedures include soft tissue grafts, bone replacement grafts, root biomodifications, guided tissue regeneration, and combinations thereof, for osseous, furcation and recession defects.

This micrograph illustrates the periodontal ligament (PL) with its collagen fiber bundles spanning the area between the root covered with cementum (C) and the alveolar bone (AB). D, dentin. (Undecalcified ground section, unstained and viewed under polarized light.)

Scaling and root planning using hand instruments:

The aim of scaling and root planning is to remove the bacterial biofilm, calculus and contaminated cementum. Numerous studies have proven the effectiveness of reducing the bacterial load, and thus controlling the subgingival microflora, by scaling and root-planning. Research in animals and in humans indicates that the formation of new connective tissue attachment following scaling and root planning or flap surgery is not predictable. Although some new connective tissue attachment may form, a long junctional
epithelium is what predictably establishes itself on the root surface. Therefore, scaling and root planning cannot be regarded as a regenerative procedure, although its efficacy in treating chronic periodontitis is beyond doubt.

While the aim of root surface debridement is to reduce the amount of bacteria and endotoxins on the root surface, treatment of the root surface with demineralizing agents such as acids or EDTA primarily aims to expose collagen fibrils. To achieve this, the smear layer must be removed and the mineralized component of the superficial layer of cementum or dentin needs to be decalcified.

The biological concept behind root surface demineralization is to improve blood clot adhesion to exposed collagen fibrils. Stabilization of the coagulum may have a positive effect on wound healing and is regarded as an important contributing factor in achieving periodontal regeneration.

Mesenchymal cells may preferentially adhere to the blood clot-stabilized root surface and the apical migration of epithelial cells may be reduced.

Originally, citric acid was used because of its ability to detoxify the root surface. As reports have shown that treatment with citric acid and phosphoric acid can result in root resorption and ankylosis, the chelator EDTA, which has

**Bone grafts and bone substitute materials:**

Bone fillers, have all been used with the aim of achieving periodontal regeneration. A systematic review has shown that clinical parameters are improved when intrabony and Class II furcation defects are treated with bone fillers.

The rationale behind the use of bone fillers is to take advantage of one or more of the following properties of such materials, namely osteoconduction, osteoinduction and osteogenesis, induced by transferred cells that are capable of differentiating into osteoblasts. Not all three properties apply to every type of bone filler. While the contribution of transferred cells to new tissue formation may be overestimated, osteoconduction is the most powerful property of bone fillers to support new bone.

Light micrograph illustrating new bone (NB) deposited at the periphery of a xenogeneic bone substitute material (asterisks). Note the bone bridging between neighboring xenograft particles. (Paraffin section stained with hematoxylin and eosin.)

**Guided tissue regeneration:**

Guided tissue regeneration is a technique that is based on a solid biologic principle. The rationale behind guided tissue regeneration is to use a physical barrier (barrier membrane or simple membrane) to selectively guide cell proliferation and tissue expansion within tissue compartments. The barrier membrane prevents gingival epithelium and connective tissue expansion and favors migration of cells from the periodontal ligament and alveolar bone into the periodontal defect.
Schematic drawing illustrating the four compartments from which cells can grow into the periodontal defect and repopulate the root surface after periodontal therapy:

1. Oral gingival epithelium;
2. Gingival connective tissue;
3. Bone from the alveolar process; and
4. Periodontal ligament.

Critical issue include:

(i) the complexity of the periodontium, which consists of four different tissues;
(ii) the use of very high doses of bone morphogenetic proteins;
(iii) the ideal carrier has still not been found;
(iv) The enormous costs that are associated with recombinant human bone morphogenetic proteins in relation to relatively small and non-life-threatening periodontal defects for which other treatment options exist.

**Enamel matrix proteins:**

Subject of major interest is the biological concept behind the therapeutic use of enamel matrix proteins for periodontal regeneration. Based on the circumstantial evidence, the original idea emerged that there is a causal relationship between enamel matrix proteins and cementogenesis. However, such a cause–effect relationship has never been proven experimentally. Over a period of more than a decade, more than 100 nonclinical and non-histological studies formed a basis that allowed the development of a comprehensive picture of what appears to be responsible for supporting periodontal regeneration. Overall, this data provides evidence for enamel matrix proteins supporting wound healing and new periodontal tissue formation. However, as with any other regenerative technique, patient and defect selection and appropriate recall programs are mandatory for successful outcomes. Furthermore, the clinician’s experience and skills, and a biological understanding of periodontal wound healing and regeneration, are certainly of additional advantage.

**Growth / differentiation factors:**

The rationale behind the use of bone fillers is to take advantage of one or more of the following properties of such materials, namely osteoconduction, osteoinduction and osteogenesis, induced by transferred cells that are capable of differentiating into osteoblasts. Not all three properties apply to every type of bone filler. While the contribution of transferred cells to new tissue formation may be overestimated, osteoconduction is the most powerful property of bone fillers to support new bone.
Light micrograph illustrating periodontal regeneration, as evidenced by formation of new periodontal ligament fibers (NPLF) inserting into both new bone (NB) and new cementum (NC). Detachment of cementum from the treated root (R) surface is a common finding in paraffin sections. (Paraffin section stained with hematoxylin and eosin.)

Does periodontal tissue regeneration really work?

The Answer may be simply, “Yes, it does. As a proof of principle, many histological studies, mainly performed in animals, have provided evidence that various treatment modalities have regenerative potential. According to current human-based evidence, regenerative periodontal therapies can only restore a fraction of the original tissue volume in extent.

Thus, complete periodontal restoration may still be regarded as an illusion. When it comes to predictability and a substantial extent of new attachment formation, there are only a few regenerative techniques available. Guided tissue regeneration and enamel matrix proteins certainly have a regenerative potential. However, these regenerative techniques do not relieve the dentist from his responsibilities. As with so many other sensitive techniques, important aspects to be considered as outcome determining variables include:
(i) appropriate patient and defect selection.
(ii) correct application of a regenerative device or a technique.
(iii) The dentist’s experience and skills.
Finally, it should still be borne in mind that the structural and interactive complexity of periodontal tissues is probably one of the reasons why it is so difficult to regenerate the periodontium.

References:

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"Does periodontal tissue regeneration really work"DIETER D. BOSSHARDT &ANTON SCULEAN

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It's been said "If you help an orphan to smile you will not change the world but for that one child the world will change".

When we talk about orphans, we talk about children without a family, without a father or a mother, missing the love, kindness and the needs of any child! You can find orphans in all countries around the world. Some countries provide them with the care they need while others don't. We can take Iraq as an example for the countries that have a big number of orphans. In Iraq, you can find more than a half million orphans, most of them between 0-17 years according to the survey that has been done by the ministry of planning in 2016. Most of them lost their families during the wars that happened in Iraq. Out of our responsibility as dentistry students and our love for humanitarian work, the Iraqi Dental Students Association (IDSA) held a national project for orphans called (orphan smile), this project included two parts, one for treatment and the other for entertainment. Orphan smile was held in most cities inside Iraq from north to south. Spreading love & kindness, spending lovely days and all those amazing feelings we experience just by getting in touch with orphans! Orphans are far way to be just humans, they’re ANGELS! The orphan smile project reached more than a thousand children in Iraq and the Iraqi Dental Students Association continuous to work on reaching all orphans in Iraq and helping them because IDSA built the work on the bases of sustainable development goals especially SDG3 (GOOD HEALTH AND WELL-BEING) and SDG4 (QUALITY EDUCATION) to be in the list of Associations that seek to achieve the SDGs for better world to live. Another project for orphans was held in one of the Muslims holidays during Eid-Al-Adha, it was about giving clothes, sharing good moments and entertainment with music, songs and role plays.

At the end, as IDSA members say, we'll continue to do more, give more for orphans and make them feel like they have a family because they sure need that feeling. They need to feel the love, hope, peace and all kinds of humanitarian requirements.

"May you can't change the destiny of what happened to orphans' families but you can make them feel that there's still hope to get a family that cares for them"
Actual conversation between me and the parent of my child patient:
Me: Her oral hygiene is very bad. This toothbrush is also not appropriate for her mouth because it is too big. You should get her something smaller and encourage her to brush her teeth. I have already explained her how it works.
Mother of child: I had just bought this toothbrush. What if I leave it in boiling water, then use it for myself?
Me: *stunned by the thought of it* We usually don’t advice the exchange of toothbrushes like this. You have different floras.
Mother of child: Oh, I don’t mind her flora. When she was little I used to chew the food for her and then give it into her mouth.
Me: Exactly. We don’t want this
Mother of child: Wait a minute… Is this why her teeth are so damaged? I have been blaming her father for telling her that brushing her teeth once every three days is enough.
Me: *left speechless* I see…Well, let’s do her paperwork and I will bring you some brochures on oral hygiene.

When you hear that you got 10 minutes left
Oh, no, they didn’t!
Student anecdotes volume 2

As I was waiting for the local anaesthesia to take effect, my patient just pulled his highly mobile tooth and extracted it. He then left as if nothing happened.

One of my patients fell asleep during RCT to the point she was snoring.

Actual conversation between me and my 12 y.o patient
Me: Oh boy, your salivary glands are working so fine! I don’t know what else to do to with all this saliva.
Him: I guess there are many golgi bodies functioning there.
Me: *shook*
--Several minutes later---
Me: So this is for making your filling smooth, so the microbes can’t get into the castle we just built with your tooth. *explains while changing burs*
Him: What’s the difference between this and the one you used to clean the walls of the castle? 
Me: This one has less particles. Think of their surface as smooth and rough endoplasmic reticulum.
Him: I like you. My other dentist was dumb.

What do you call a bear without teeth?
A GUMMY BEAR!

Dentist to a child: Please calm down, I’m going to inject a juice that kills the bad bacteria.
Child: I know that this is a needle and anesthesia, please do it fast!

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Keywords: Composite resin, color stability, surface roughness.

The effect of effervescent vitamin C tablets on the surface roughness and color stability of different resin composites.

Introduction: Nutrition is key to a person’s wellbeing. While the main focus is always on getting the right amount of calories and protein, in order to make up for the energy we expend, little importance is given to the proper intake of vitamins. Considering the diet of an average person nowadays, the usage of vitamin supplements has become, if not a must, a necessity for the majority of the population. Among all supplements, vitamin C seems to be the most used one and the pharmaceutical market serves a variety of choice for this vitamin’s intake. As compared to normal vitamin C tablets, the exposure time of teeth to the effervescent tablets dissolved in water is relatively longer. Research [1,2] has already investigated the effect of such exposure on teeth. But, taking into account the fact that most people have aesthetic fillings the question on our minds was what effect it would have on composite filling materials.

Aim: The aim of this in vitro study was to evaluate the effect of different effervescent Vitamin C tablets on the surface roughness and color stability of different polished resin composites.

Materials and methods: A total of 90 disc-shaped specimens were fabricated from three different resin composites; a nanohybrid universal resin composite - Harmonize, a nanoceramic resin composite - Ceram. X duo and a nanohybrid Bulk Fill - Tetric EvoCeram Bulk Fill. All specimens were stored in distilled water at 37°C for 24 hours. Thirty discs of each resin composite were randomly divided into three subgroups and immersed in distilled water, Redoxan and Sambucol (n=10). The initial color values were measured with a spectrophotometer (VITA EasyShade) according to the Commission Internationale d’Eclairage (CIE) L*a*b* and surface roughness measurements were performed using a surface profilometer. Specimens were immersed in effervescent solutions 1 min/day for 10 days. Both color and surface roughness were remeasured after 10-day immersion and color change (ΔE) was calculated. The color change data was statistically analyzed using Two-way, One-way ANOVA and Tukey HSD test, whereas surface roughness was analyzed using Three-way ANOVA and Bonferroni correction (p<0.05).

<table>
<thead>
<tr>
<th>Description of the materials and solutions used</th>
<th>Manufacturer</th>
<th>Type</th>
<th>Composition</th>
<th>Batch Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATERIAL</td>
<td>Harmonize</td>
<td>Kerr</td>
<td>Nanohybrid universal composite with infused adaptive response technology</td>
<td>Methacrylate resin, silica</td>
</tr>
<tr>
<td></td>
<td>Ceram X Duo</td>
<td>Dentply</td>
<td>Nanoceramic Resin Composite</td>
<td>Methacrylate-modified triglycidyl ether dimethacrylate, bisglycidyl methacrylate, triethylene tetramine, aluminium trihydroxide</td>
</tr>
<tr>
<td></td>
<td>Tetric EvoCeram Bulkfill</td>
<td>Ivoclar Vivadent</td>
<td>Nanohybrid bulkfill resin composite</td>
<td>Bis-GMA, UDMA, BisEMA, borium, alumina silicate, glass filler</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparison of Effervescent Tablets Used</th>
<th>Sambucol</th>
<th>Redoxan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin C</td>
<td>60mg</td>
<td>1000mg</td>
</tr>
<tr>
<td>Acidity regulator</td>
<td>Citric Acid, Sodium Hydrogen Carbonate</td>
<td>Sodium hydrogen carbonate</td>
</tr>
<tr>
<td>Thickener</td>
<td>Maltodextrin</td>
<td>Isomalt</td>
</tr>
<tr>
<td>Colorant</td>
<td>Beetroot</td>
<td>Beta caroten</td>
</tr>
<tr>
<td>Sweetener</td>
<td>Sucralose</td>
<td>Acesulfam K, Aspartam</td>
</tr>
<tr>
<td>Flavor</td>
<td>Raspberry flavor, cherry flavor</td>
<td>Tangerine flavor</td>
</tr>
<tr>
<td>Zinc</td>
<td>Zinc sulphate</td>
<td>Zinc citrate</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>Sorbitol, polyvinylpyrrolidone, black elderberry extract</td>
<td>Polyethylene glycol</td>
</tr>
</tbody>
</table>
**Results:** The color change values (see table 2.) of the Ceram.X Duo and Harmonize resin composite specimens were found to be above the acceptable clinical values ($\Delta E > 3.3$). While there was no difference between Ceram.X Duo specimens immersed in Sambucol and Redoxon, in terms of color change ($p>0.05$); in Harmonize and Tetric BulkFill specimens, a significant change in color was found between the two effervescent tablets ($p<0.05$). The effervescent tablets lead to a statistically significant change only in Ceram.X Duo resin composite’s roughness ($p<0.05$). Sambucol significantly altered the surface roughness of Ceram.X Duo specimens ($p=0.012$). (see table 3).

<table>
<thead>
<tr>
<th>SOLUTION</th>
<th>RESIN COMPOSITE</th>
<th>Mean ($\Delta E$) ± Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>REDOXAN</td>
<td>Harmonize</td>
<td>8.5 ± 2.61</td>
</tr>
<tr>
<td></td>
<td>Ceram X Duo</td>
<td>5.2 ± 1.16</td>
</tr>
<tr>
<td></td>
<td>Tetric EvoCeram Bulkfill</td>
<td>3.2 ± 0.87</td>
</tr>
<tr>
<td>SAMBUCOL</td>
<td>Harmonize</td>
<td>6.5 ± 0.82</td>
</tr>
<tr>
<td></td>
<td>Ceram X Duo</td>
<td>5.6 ± 0.39</td>
</tr>
<tr>
<td></td>
<td>Tetric EvoCeram Bulkfill</td>
<td>2.1 ± 0.77</td>
</tr>
<tr>
<td>DISTILLED WATER</td>
<td>Harmonize</td>
<td>5.4 ± 0.95</td>
</tr>
<tr>
<td></td>
<td>Ceram X Duo</td>
<td>5.71 ± 0.16</td>
</tr>
<tr>
<td></td>
<td>Tetric EvoCeram Bulkfill</td>
<td>2.33 ± 0.70</td>
</tr>
</tbody>
</table>

**Discussion:** The effect of effervescent vitamin C tablets on surface roughness and color stability of resin composites could be material-dependent. The color change values can vary depending on the amount of vitamin C and the coloring agent types. As for the surface roughness, the results were unexpected. We attributed the results to the limitations of this research, considering this was an in vitro study what was conducted for only 10 days on a narrow spectrum of composite resin materials. Moreover, the samples were stored in distilled water as opposed to human saliva; which could also be a potential factor affecting both surface roughness and color change, due to its varying pH and buffering properties. Taking into account these limitations, other possibly in vivo research should be conducted for longer exposure times and different composite resin materials.

**References:**
While dentistry is a profession that continuously evolves and is renewed, so should the dentist and the equipment. Up until some decades ago, the standard position in which dental procedures were performed, was with the patient seated upright and the dentist standing right next to the patient. With time, it was understood that working in this position for prolonged periods of time damaged the dentist, thus causing musculoskeletal disorders. It was at this moment of realization that ergonomics in dentistry came into play.

The ideal posture of a dentist gives him on the one hand, optimal working conditions (access, visibility and control in the mouth) and on the other hand, physical and psychological comfort throughout the execution of the clinical acts. A "good" posture provides the dentist more working energy, a reduced stress level, increased comfort, lack of pain and muscular tension and a lower risk for therapeutic errors. A "bad" posture induces premature fatigue, pain, stress and a negative attitude to work, high-risk for musculoskeletal disorders and a poor quality of work [1]. Many dentists work in incorrect postures because of their habit, working routine and poorly designed workstations. All these conditions act on the lack of the dentist’s information in the field of ergonomics and on ignoring the fact that the human body has its adaptive limits. Beyond these limits, the dentists are exposed to the risk of professional illness. [2]

The posture described in “ISO Standard 11226 Ergonomics - Evaluations of static operating postures” is recommended for the dentists and is called balanced or neutral posture. This is a seated posture - natural, unforced, stress free and symmetrical - that takes into account the loco-motor physiology of the human body. The neutral posture is the result of the general ergonomic studies adapted to the needs of the dental practice. [2]

The balanced posture features can be summarized as it follows [3]:
- A straight back and respect for the body symmetry; avoiding rounding the back into "C" shape;
- Forward inclination of the trunk of a maximum of 20°; a greater forward inclination, the tilting to a side and the trunk rotation are contraindicated;
- Forward inclination of the head up to 20-25° from the trunk;
- The arms placed along the body, forward oriented within 10°; the forearms raised up to 25° from the horizontal line;
- The angle between the thighs and shanks of 105-110° or more;
- The thighs apart up to 45°, avoiding a rigid fixation of the hip joint;
- The shanks oriented perpendicular to the floor or slightly posterior;
- The feet on the floor oriented forwards in the same plane with the shanks; when the feet are symmetrically positioned below the operator hands, the posture is balanced.

The postural symmetry implies all the body horizontal lines (the eyes, shoulders, elbows, hips and knees horizontals) being parallel and perpendicular to the median line of the body.

In an ideal situation, the surface of the treated teeth should be parallel to the front of the dentist and his view oriented perpendicularly to the working field. It is recommended that the distance between the working field and the dentist’s eyes is of 35-40 cm or slightly higher for very tall dentists. When this relationship is not established, or it is lost during the clinical act, the dentist’s eyes will look for it and the dentist will depart instinctively from the balanced posture. [3]

In order to maintain this position, there are certain details to be taken into account. The height of the dental chair and the position of the dentist relative to the patient position are the two main factors.

The chair height differs according to the jaw the dentist is working on. For procedures on the maxillary teeth the chair height should be 8cm below the shoulder level of the dentist; while for procedures on the mandible the chair height should be 16cm below the shoulder level of the dentist.

The position of the dentist is based on the dentist’s working hand and the dentition arches the dentist is working on.
Working Positions

For those of you who are right handed the positions are as follows: [4]
- 7 o’clock to the front of the patient’s head
- 9 o’clock to the side of the patient’s head
- 10-11 o’clock to the back of the patient’s head
- 12 o’clock directly behind the patient’s head

Meanwhile, for those of you who are left handed:
- 5 o’clock to the front of the patient’s head
- 3 o’clock to the side of the patient’s head
- 2 - 10 o’clock to the back of the patient’s head
- 12 o’clock directly behind the patient’s head

It is also important to properly position the patient for ease of operation. While the patient is generally in a supine position, with the mouth close to the resting elbow of the dentist; for procedures on the maxilla, the back of the chair should be at 45° from the floor and the patient’s chin should be facing up. For procedures on the mandibula, the back of the chair should be almost parallel to the floor and the patient’s chin should be facing down.

Finally, if we were to divide the arches in sextants.
For the areas in green, the ideal position is 9-11 o’clock
For the areas in blue, the ideal position is 11-12 o’clock
For the areas in green, the ideal position is 10-12 o’clock
For the areas in blue, the ideal position is 11-12 o’clock
A great deal of innovative technology has been integrated into the modern dental office during the last several decades. However, no product can increase productivity and reduce stress and strain on the dental team as much as using the singular concept of four-handed dentistry. The research of the 1950s is undaunted in its impact on productivity. Combined with the practice of ergonomics in the workplace, this concept must be revisited by the dental profession. The young dentists of the 21st century have had minimal exposure to true four-handed dentistry. [5]

In our days, the dental assistant fulfills a dual function: secretarial and dental office management plus the technical and material assistance during interventions. Their presence is primordial insofar she helps reduce the dentist mental and physical workload therefore providing a more appropriate work environment with minimal stress and disorder. The assistant autonomously performs many tasks:
- Reception of the patient upon arrival at the office.
- Chair assistance: preparation of filling and impression materials, preparation of instruments for the dentist. She also realizes the x-rays, which she then archives correctly.
- Maintenance of instruments and devices: cleaning, disinfection, sterilization.
- Administration of the firm: establishment fees invoices, accounting of the patient payment, keeping the agenda of appointments, the control and management of stocks including the orders, convocation of the patients for the controls, telephone reception, correspondence, etc. Due to these reasons, we cannot give up the assistants help for better working condition and self-(mental and physical)-care.

Last but not least, hygiene and safety in the workplace are not to be disregarded. Dental surgeons and dental assistants are exposed many kinds of risks: chemical, infectious, physical and radiological ones related to the dental care they provide to their patients. They handle irritating and allergenic agents, disinfection of instruments; they often have arduous postures during the care or the preparation of the products or the cleaning of work plans, they undergo accidents with exposure to the blood or to the liquids and biological particles due to injuries with the instruments, by ocular projections or by inhalation and in addition they can be exposed to radiological rays and ultrasounds.

Thus, some collective and individual prevention measures can significantly reduce all these risks:
- Wearing scrubs or a white coat, gloves, glasses and masks.
- Ventilation and aspiration of the environment to reduce the concentration of dust and gases, responsible for lung risks.
- Have a hand basin (non-manual, with hot water, equipped with liquid soap dispensers, disposable hand towels, disinfectant hydro-alcoholic solution, and a trash can).
- Handwashing, cleaning and disinfecting soiled surfaces, transporting soiled materials in tight sealed packaging, must be subject to rigorous procedures.
- The dress code of the dental staff corresponds to a high level of biological risk: short sleeves, tunic pants, hair up, short nails without varnish, hands and forearms without jewellery.
- An adapted storage of the pharmaceutical and chemical products presents risks such as the risk of falling or overturning packaging.
- The presence of suitable fire extinguishers, emergency lighting, electrical installation in compliance with the safety standards is essential.
- Single-use instruments must be used only once and then disposed of.
- Use appropriate collection containers for the disposal of care materials that have been in contact with the patient (cotton, compresses, probes, syringes, etc.).
- Do not eat or drink at the workstation.

To sum up, we should be conscious of all details that may threaten our health and hygiene by being aware of the significance of working position and stretching recommendations, considering that our daily work is almost entirely based on physical practice. In addition, it is essential to take into account hygiene, safety and equipment details to avoid risks of work accident, health damages and discomfort. Finally, it would be the icing on the cake to finish by emphasizing the primordiality of the dental assistant help, who facilitates any practice and ensures a well-organized working environment under the rules of art and self-care.

References
2. An introduction to ergonomics: risk factors, MSDs, approaches and interventions, A report of the Ergonomics and Disability Support Advisory Committee (EDSAC) to Council on Dental Practice (CDP. ADA.org. 2004
The ancient Egyptian civilization, one of the world’s first great cultural awakenings, stirs the popular imagination and today it holds an enduring fascination for many people. Developing from prehistoric origins, Egypt unified around 3100 BC into a single state, and then survived for over 3,000 years. A few of these ancient Egyptians involved in this struggle are known to us today, but the vast silent majority who created and sustained this spectacular culture are not. We know something about the society they lived in, but what do we know about their health and, in particular, their dental health? Let’s first start with those anonymous people who have enriched the ancient Egyptian civilization and especially the health aspect of it,

**The first dentist in human history (HESY-RA):**

Dentistry at that time was crude by today’s standards; HESY-RA often drilled holes in teeth to help drain the infection, or so the story goes. The drilling, however, paved the way for advanced dental techniques such as root canal therapy, in which the dentist has to drill all the way through the teeth to treat the abscess.

**What about the Dental Health in Ancient Egypt?**

In ancient Egypt, the dry climate together with their unique burial customs resulted in the survival of large numbers of well-preserved skeletal and mummified remains. Extensive examinations of these remains have demonstrated the many pathological and non-pathological conditions seen in the dentitions of these ancient people. This, together with the surviving documentary, archaeological and ethnographic evidence has enabled a detailed picture of their dental health to be revealed; more so than perhaps for any other civilization in antiquity.

The conclusions from these surveys suggest that far from having healthy dentitions the ancient Egyptians suffered from extremely worn teeth, periodontal problems and numerous dental abscesses. Significantly, these disorders were not only experienced by the peasants—the overwhelming majority of the population— but also by the pharaohs and the elite of society.

The most frequent pathological condition identified was that of excessive tooth wear, a condition so widespread that it was found in most of the ancient Egyptian skulls throughout the dynastic period. A study of 4,800 ancient Egyptian teeth, found that nearly 90% of the teeth showed some evidence of tooth wear. This disorder has often been categorized as attrition, but analysis of the problem reveals that attrition was not the sole agent responsible for the loss of tooth tissue. Contamination of the food by significant numbers of inorganic particles resulted in an additional element of abrasion.

Finally, the strange sayings on that subject are one of the causes of death of the queen of Egypt Hatshepsut – She is generally regarded by Egyptologists as one of the most successful pharaohs reigning longer than any other woman of an indigenous Egyptian dynasty which had an abscessed tooth that was pulled. She died in excruciating pain from an infected tooth at the age of 50.