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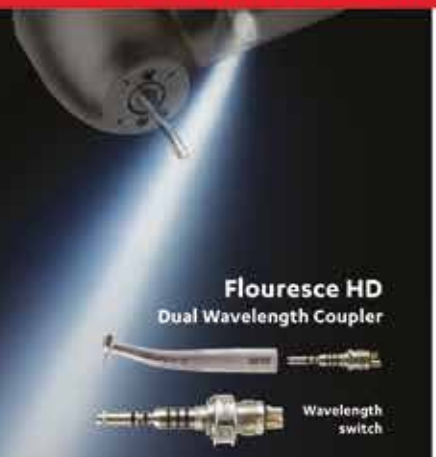

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IDS 2021 Hall 3.2, C050

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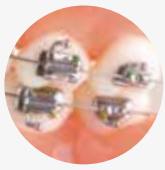

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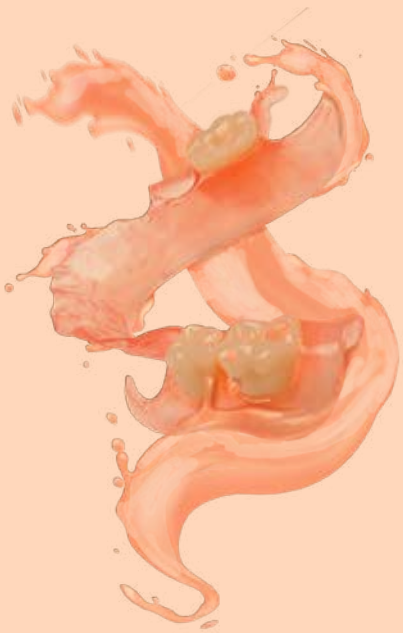

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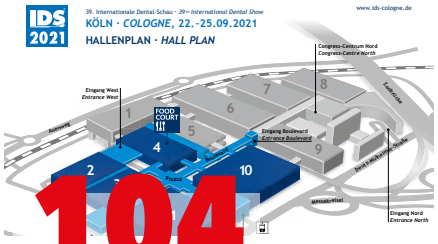

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Due to the current situation, we warmly invite you to double check booths location listed.

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International Dental Show Cologne 2021

A global platform for a common declaration of no vested interests

Gerhard K. Seeberger

The weakest of societies do not know borders and their reality differs insignificantly in high-income countries compared to LMICs, as costs for digital tools and services are prohibitively high everywhere. This circumstance shifts the dream of realizing the World Health Organization's, WHO, OralHealth program, aiming at universal access to digital oral health, to unknown dates.

The dental community as well as the dental industry has the privilege to live and survive in unrivaled spheres through evolutionary adaptation in the same ecologic niche. While dentists tend to benefit to the environment in their social niche in the medical arena, dental industry contributes to global society in an economic niche in the industrial conglomerate.

The COVID-19 pandemic has surprised unprepared mankind and dentists, dental industry, and patients had to face a never seen disruption of oral healthcare and disease prevention. In the initial phase of the pandemic many countries were in a complete lockdown, with no dental treatment and only emergency care, eagerly supported by tele-dentistry, which failed to meet the populations' real dental treatment needs, available. While the users of dental devices, instruments and materials - dentists and their patients - had to deal with their restrictions, the producers of the above - the dental industries - found themselves in front of reduced or prohibited international business and trade. Inequalities are hitting populations in low- and middle-income countries (LMICs) hardest during COVID-19, and they will not be lowered by available digital technology and tools on a short run.

The weakest of societies do not know borders and their reality differs insignificantly in high-income countries compared to LMICs, as costs for digital tools and services are prohibitively high everywhere. This circumstance shifts the dream of realizing the World Health Organization's, WHO, OralHealth program,

aiming at universal access to digital oral health, to unknown dates. The oral health of people is worsening as oral healthcare is postponed due to health illiteracy of the public, and oral health maintenance and oral disease prevention are considered non-essential.
While the activities of dentists are back to over 80% in many places, others are still or again in struggle with lockdown measures. To date the results of using Artificial Intelligence, Internet of Things and digital tools of latest technology, meant to compensate or even substitute consolidated oral health care and oral disease prevention, are unclear. How would they be measured, and wouldn't globally varying social, moral, and commercial determinants of health alter the picture?

Dental industry was already in the grips of change before the COVID-19 pandemic started. This can be summarized as follows:

- Retailing dental supplies are slowly being abandoned in favor of shopping online;
- The tele-dentistry sector is slowly growing;
- A new form of dental practice is growing fast (Dental Service Organizations – DSO).

For industry observers all three are likely to become more prominent as a result of the pandemic shock to the industry. Today 18%-20% of dental practices are affiliated with DSOs in the United States, and an increase of 30% to 35% is to be expected in the next five to ten years. Similar trends are foreseeable in other high-income countries. Actually, dental industry has no imminent solution to the COVID-19 crisis. According to projections of the American Dental Association, dental industry faced an overall reduction of 38% in 2020, and a 20% reduction for 2021 is foreseen assuming no major changes to the status quo over the winter. Times are still too uncertain and the current volume of dental practices is not sustainable.

There are certainly ways out of the dilemma for the dental industry. One to be considered is multilateral cooperation, but in times of COVID-19 the future of such an approach is uncertain.
After the pandemic international cooperation is key to manifold solutions. It is important not only to prevent future global health calamities, but also to alleviate the economic and social ramifications. International production is enabled only if coordinated fiscal measures and industrial policies at the global and regional levels to support export-oriented Global Value Chains are in place, and if impediments to internationally traded goods and services are removed. Trends and trajectories provide a broad indication for the directions that international production may take in the decade to 2030.
None of those involved in dentistry, dentists,

industry and patients alike, will deliver the absolute solution. We must take into account that the flight to the final destination – Delivering optimal oral health to all – the title of FDI's Vision 2030 – will not be unmanned! The Vision 2030 focuses on a multitude of different stakeholders and mentions in first place industry partners, besides academicians, educators, researchers, policymakers, and population at large. It is built around 3 pillars, being *Pillar 1 Universal Coverage for Oral Health, Pillar 2 Integrating Oral Health into the General Health and Development Agenda, Pillar 3 Building a Resilient Oral Health Workforce for Sustainable Development,* braced by a foundation of supporting educational activities.

These educational efforts are needed to:

1. enhance the focus on evidence-based dentistry and critical thinking;
2. educate and train oral health care professionals to learn how to advocate for oral health and empower patients to take responsibility for their own health and well-being;
3. provide education and training for collaborative education practice across health care disciplines;
4. encourage and implement person-centered approaches to care;
5. promote oral health literacy among patients and all health care professionals;
6. and engage with industry partners to provide support for the integration of emerging technologies in the context of universal health coverage.

This last point will be best initiated when the abovementioned stakeholders meet in settings like the International Dental Show. Getting closer and leaving single vested interests outside the door will widen the space at the table for other professionals from technical, social and educational sciences. Emerging technologies is not a synonym for high-tech, and the context of universal health coverage takes high- and low-end settings into equal consideration, while opening for new action fields and markets. Science has brought to light that 1$ invested into oral health generates health benefits of 1$ in return. Once health policy makers will realize that economic benefits of implementing universal coverage for oral health will outweigh the costs, the dental profession and industry are best partners to implement the requests defined in the WHO's Oral Health Resolution and to achieve the United Nations' Universal Health Coverage – Leaving no one behind!

Gerhard K. Seeberger

Conflict of interest:
The author declares that he has no conflicts of interest.

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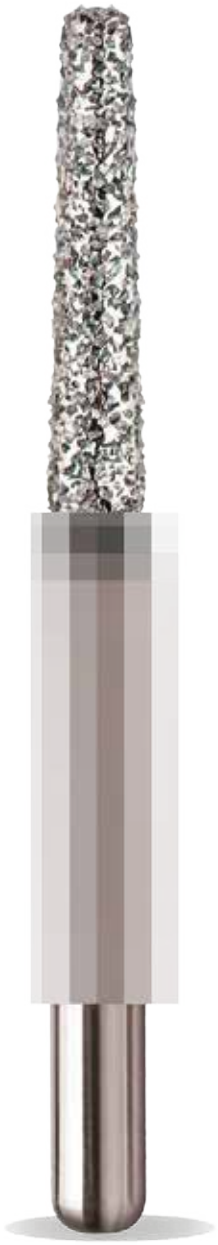

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Dual Top Anchor System is a comprehensive system that includes **Dual Top Screws, Anchor Plates, and Battery-powered Torque Driver** which enhance Orthodontist's ease of procedure. Dual Top Screws are made of titanium alloy (ASTM F136) and consist of a variety screw designs, and Anchor Plates are made of titanium (ASTM F67).

www.jeilmed.co.kr
global@jeilmed.co.kr
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W.R. Rayson Export Ltd. has been supplying quality dental products at competitive prices for over 50 years. Our product line includes Articulating Papers, Films, Foils and a variety of other dental products that are produced at our facility located in Burgaw, North Carolina, USA.
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You will be able to see a complete digital process presenting Medit scanners, Exocad SW and most sold Interdent milling unit – CC Trendy.

Beside CAD/CAM technology we will present also classic materials, milling center and new coming web shop.

Due to the Covid restriction we suggest you to apply for a meeting in advance. You can contact us on e-mail **marketing@interdent.cc**

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RTI Group is setting the Standard in Dental X-ray QA

Since 1981, when we launched the first commercially available multimeter to measure non-invasive kV, our goal has been to set the global standard for Quality Assurance (QA) in dental X-ray imaging.
We continue to invest heavily from R&D to training, not only to remain at the cutting-edge of X-ray QA, but also to develop complete solutions that address all customer needs.
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The GOCCLES® (Glasses for Oral Cancer – Curing Light Exposed – Screening) by Pierrel

Pierrel is an Italian pharmaceutical company, authorized by EMA and FDA for the aseptic production of injectable drugs and medical devices. After over 70 years of experience, Pierrel is one of the world's leading manufacturers of dental anesthetics, including Orabloc® marketed in over 20 countries. Thanks to the collaboration with Catholic University of Sacred Hearth of Rome, Pierrel launched GOCCLES®: special glasses with an innovative optical filter, which allows to perform a quick, non-invasive and painless examination of the oral cavity thanks to autofluorescence. This technique allows screening of oral mucosa in just one minute and provides adequate support for the early detection of dysplastic area's and potentially malignant lesions. GOCCLES® package include also the GOCCLES® App, available on Apple Store or Google Play.

The App contains a library of lesions with associated description of the most common pathologies, facilitating the identification of the lesion.

www.pierrelgroup.com
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www.saeyang.com
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MPI Implants

MPI was established in 2008 in Madrid, as the pioneer dental manufacturer of German origin. Its product range includes 5 dental implant systems:

- **MPI Privilege®**: with straight body, and internal or external connection.
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- **MPI All-In®**: the new straight-conical body implant, which includes an elegible prosthetic component. All implant systems are treated with **Integratec®**, a surface treatment, to accelerate its osseointegration.

MPI is searching for distributors.
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Techbiomat Bone®: Maximum safety and efficacy in bone regeneration

Technology in Biomaterials is a Spanish company specialized in biomaterials for dental use that develops and manufactures its own products with the international cooperation of experts and universities in various countries. Techbiomat Bone® is an hydroxyapatite from bovine cancellous bone. Given the characteristics of its natural and anoganic structure, Techbiomat Bone® can be compared to human bone.
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Richmond Dental and Medical's SteriPocket Nonwoven Sponges

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For over 125 years, Richmond Dental and Medical has been manufacturing quality dental products. Headquartered in Charlotte, NC, we are vertically integrated with our cotton supplier. Richmond's MultiPly nonsterile sponges are ideal for oral surgery since they are lint free and provide superior absorbency. Two of these 8-ply, Rayon/Poly sponges are also offered in a sterilized, pre-packaged SteriPocket. Available in sizes 2x2 or 4x4 inches, SteriPockets are perfect for dispensing to patients after an extraction. The SteriPocket has been a Dental Advisor's Preferred Product for many years, as well as an Editors' Choice award winner. Please visit our website (www.richmonddental.net) to learn more about our single use disposables and infection prevention dispensers.

www.richmonddental.net
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The NEW Orthodontics Bracket Trend in IDS 2021 by GNI ORTHO

GNI ORTHO is an Orthodontic manufacturing company in South Korea. We introduce the new Ceramic Passive Self-Ligating Bracket (Venus-P) that will be launched in IDS 2021.

1. Perfect full-ceramic aesthetic self-ligating bracket
The new VENUS-P is a 100% translucent ceramic self-ligating bracket presenting the exceptional aesthetic choice. Smaller body, stronger resistant, smoother edges, and rounded tie-wings provides excellent intraoral comfort for your patients. No more intraoral complaints

2. Patented base for optimal bonding and de-bonding
Patented double layer cross-etched base is designed to strengthen the bonding retention. Easy and clean debonding with the beveled base edges giving no-stress experience.

3. Innovative slide mechanism for effortless wire changes
The innovative ceramic door provides effortless but reliable door sliding mechanism aids the wire changing process. The unique pin-system prevents unwanted door opening and closing to keep wires in place.

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highest translucency on a rock solid base

MADE IN GERMANY - AT ITS BEST

1st layer	2nd layer	3rd layer	4th layer	5th layer
≥ 600 MPa	≥ 765 MPa	≥ 930 MPa	≥1100 MPa	≥1100 MPa

(5 layers plus 4 transition layers)

49% enamel translucency - 47% transition layers
45% natural dentin translucency

DLC coating (Diamond-Like-Carbon) on Dia-Tessin burs

The special coating DLC acquires the same properties of a diamond due to his tetrahedral structure. The quota of the sp3-configured carbon lies around 80-95%, which is the reason for the high quota of diamond structure.

Furthermore, due to his procedure, the Dia-Tessin's coating is completely free of hydrogen.

The thereby obtained structure endows the coating with the following properties:
1. Extreme hardness of about 5'300 HV (twice as hard as other DLC layers)
2. Utmost wear resistance (around two times compared to other DLC layers)
3. Very low friction coefficient
4. Perfect adherence, thanks to a special intermediate layer
5. The cutting edges retain their shape increasing the life of the instrument
6. Chemical stability and corrosion resistance
7. 100% biocompatible

www.vanetti.ch
mail@vanetti.ch

DMP presents the BRIGHT Temporary C&B family

DMP, a European manufacturer of high-quality dental materials, successfully supplies the global dental market for over 35 years. Certified with ISO 9001, 13485 and MDSAP, DMP's products carry the CE mark and have U.S. FDA clearance. DMP creates bright smiles achieving excellence and reliability through integrity, passion and commitment which are ingrained in DMP's culture.
DMP expands its BRIGHT Temporary Crown & Bridge family with the 10:1 and 4:1 delivery systems. Exceptional aesthetic results, combined with optimal mechanical and physical properties, make them ideal products to fabricate provisional restorations. The unique and highly advanced technology of BRIGHT Temporary C&B also offers:

- Natural tooth-looking aesthetics due to the perfect combination of shade opacity and fluorescence
- Very low temperature during intra-oral setting which protects against damage of the dental pulp
- Very high compressive and flexural strength for long lasting provisionals
- Colour stability
- Easy polishing due to low oxygen inhibition layer

www.dmpdental.com
info@dmpdental.com

Visit us at: IDS 2021, Hall 10.1, Booth B019
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DIGISMILE - Your Fast, Accurate and Smart 3D Intraoral Scanner

NEW LIFE RADIOLOGY presents DIGISMILE, one of the lightest, smallest and most compact 3D intraoral scanner on the market. Light as a turbine, practical as a pen. Ergonomic, simple and elegant, stable base, powderless, quick real time/realistic color, plug and play, single-hand scanning.

DIGISMILE it's 2-in-1 device, 3D scanner and HD intraoral camera, which allows Doctor to perform full arch upper, lower and bite intelligent scan within a few minutes. Anti-fog function by built-in heater. Easy-to-use, precise and accurate, automatic calibration. Small autoclavable scanner tips, small body with easy access to posterior area. Large depth of field for multiangle scanning, automatic scan retracing to revisit previously scanned sections and re-scan missing areas. Software with 3 modules: restorations, orthodontics and implant-bone restorations, no SUBSCRIPTIONS REQUIRED, completely Open System "STL FREE" (scanner file output STL, PLY). Exocad compatible.

www.newliferadiology.it
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DLyte Desktop, the First Ultra-Compact Dry Electropolishing Machine for Small Dental Labs

GPAINNOVA, the leading company in surface finishing technologies has just launched its ultra-compact dry electropolishing machine: DLyte Desktop Dental and DLyte Desktop PRO. Due to its low price, starting at €10,000, the new device is affordable to any dental lab, no matter what size, and allows an automated polishing process for cobalt chrome (CoCr) and Titanium (Ti) pieces. DLyte Desktop is a cost-effective solution, from grinding to mirror finishing, the new set-up offers an easy way to process any casting, sintering or milling dental piece with a cost reduction up to 80% compared to manual polishing. DLyte Desktop Dental also improves the work environment of small dental laboratories by replacing traditional hand polishing and hazardous materials.

www.dlyte.es // info@gpainnova.com
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IDS 2021: SMILER PRO srl
Hall 10.2, Booth L068 M069

SMILERPRO

SmilerPro is an **innovative Italian start-up** with high technological content manufacturing Hardware and Software for dentistry and medicine. Born from an idea of the founder turned into a patent first, then in a company, and finally in an innovative product. **Smiler Pro is now launching a creative "augmented reality" device, thought for the dental industry**. Its high-resolution camera keeps the vision of the mouth always in the foreground and with a static mode during the visit and dental treatments. This important feature allows the dentist to evaluate the proportions of the teeth and their respective aesthetic symmetries, facilitating the operative procedures and doctor-patient communication.

info@smilerpro.com | www.smilerpro.com

SmilerPro is attending IDS 2021, looking for new markets and possible distribution partners.

UGIN Dentaire

For over 40 years, Ugin dentaire has been developing, manufacturing and distributing products and materials for dental professionals. We intend to give you easier solutions to make your daily work reliable. We have a complete equipment catalogue and a wide range of consumables:

- equipment: ceramic furnace, sintering furnace, burnout furnace, casting machine, steam cleaner, duplicator for gel, electrolytic polishing, electromagnetic polishing, sandblaster, atomizer,
- consumable: alloys, waxes, polishing/sands, partial framework program, resins, investments, silicones, attachments, ceramic, artificial teeth…

Ugin dentaire is committed to providing hight quality products, certified under ISO 9001 and ISO 13485 standards, with the main goal of customers satisfaction. Ugin dentaire has a highly efficient after-sales service which provides customers with technical assistance on materials and products provided by qualified teams. We carry out in France and all over the world adapted training and demonstration to improve the use of our products. For any information, please contact us.

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UGIN Dental laboratory solutions

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Why Choose JPS Dental Simulator

JPS DENTAL

The JPS-FT-III dental teaching simulation system is a professional dental teaching equipment, which completely simulates the actual clinical operation, so that students and medical staff can form the correct operating postures and techniques before the clinical operation, so as to make the transition smoothly to the real clinical treatment. It can be applied to intern students of dentist majors in colleges and universities, on-the-job training of doctors in medical institutions, etc. In order to simulate the oral clinical treatment operation to the greatest extent, the teaching model adopts the same four-handed operation design as the clinical treatment equipment, equipped with high and low speed handpiece, 3-way syringe and saliva ejector system. In addition, it is equipped with two memory positions. Long press for 3 seconds to accurately remember the set position. The one-key reset function brings more convenience to users.

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TRAYDEX 45 LED Light Curing Machine

This production is light -curing machine for dental laboratory use. It contains 16 levels of light intensity adjustment, 10 stages of duty cycle(flash cycle) and 5 secs to 995 secs time control. Four Advantages:

1. SAVE TIME: Fast Curing- High power LEDs, broadband LEDs, save fabrication time.

2. SAVE COST: Stable Light Volume- High power LEDs with constant current circuit; there's no need to change UV fluorescent light tube.

3. EASY TO USE: Memory Setting- Multi-memory setting function; it's easy to recall the habitual settings.

4. POST-CURING FOR 3D PRINTED: High power UVA LEDs is included, which results in a quick and uniform curing cycle.

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Mestra microwave sintering furnace for zirconia Ref. 080114

WORLD SCOOP

Microwave sintering furnace for zirconium prostheses

Advantages:

- Minimum total sintering time of only 4 hours.
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- Very low consumption (800/1100 W).
- Allows several production cycles on the same day.
- Very easy to operate.
- Much smaller than conventional ovens.
- The housing practically does not get hot.

The oven is supplied with all necessary accessories for immediate start-up. Height: 547 mm / Width: 440 mm / Depth: 385 mm / Weight: 31 kg / 230 V / 50 Hz / 2000 W / Max. temperature: 1550 ºC

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Stop to wasting time & stop the hesitancy choosing composite shade. Anymore, with only one syringe, all shade teeth will be restored.

Zenchroma is a light curing, hybrid composite containing an ultrafine, radiopaque glass filler and is indicated for placing fillings using adhesive techniques. It can be polished to a high lustre. Due to the ultrafine particle filler, extremely homogeneous restorations can be placed which are easily polished to a high lustre. The chameleon effect matches the shade of the filling perfectly to the tooth structure. The guidelines of EN ISO 4049 have been complied with. Zenchroma is available in syringes and compules. The compules are for single use. Please do not reuse them, as this makes it impossible to rule out contamination and germ formation.

Indications

- Direct anterior and posterior restorations in Black's classes I, II, III, IV, and V cavities.
- Inlays, onlays and laminate veneers
- Extended fissure sealing in molars and premolars
- Splinting loose teeth

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Miglionico: It's time to be Nice!

Miglionico is an Italian company specialized in the manufacturing of made in Italy dental units. Our added value is that all the stages of production are carried out at the factory, from the careful selection of the raw materials to the final quality control. All of this makes our units unique and flexible to meet the needs of our clients. The Nice Touch unit is characterized by a 7" color multifunction display with glass surface and capacitive touch technology, which guarantees optimal content management

thanks to the countless possibilities of customization. All the instruments have a dedicated menu that allows the doctor to set the parameters and activate all the functions in a simple and intuitive way. The micromotors have dedicated programs to perform endodontic and surgical treatments in total safety and precision. These are just some features of our four "NICE" lines of dental chairs. Come and discover them at our booth at IDS. It's time to be Nice!

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HexaTemp - 1:1 Temporary C&B Material

SPIDENT officially launches HexaTemp, bisacrylic self-curing resin, ideal for temporary crown and bridge. It is practical thanks to the compatibility of its cartridge with 1:1 dispensers and mixing tips of VPS impression material. HexaTemp doesn't need trimming or relining. It is ideal for long-term temporaries and longer bridge spans as it has exceptional compressive strength and flexural strength with good durability. And it is suitable for long term with high fracture resistance. HexaTemp shows high gloss, even without polishing, and fluorescence similar to natural teeth.
It is available in 4 shades: A1, A2, A3, and TW.

www.spident.co.kr
synergy@spident.co.kr // export@spident.co.kr

Visit us at: IDS 2021, Hall 11.2, Booth L30-M31
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TCS Thermoplastic Resins & Equipment
BPA/Metal Free Flexible Partials & Full Dentures

An ISO 13485 Certified Company

TCS, Inc. is a dental manufacturing company dedicated to providing dental laboratories with exceptional quality materials and equipment that are accessible and reliable. Forming strong partnerships is at the core of TCS brand, because for TCS, manufacturing is more than just a business, it is a collectivist culture. With three resilient, high performing resins to choose from; Unbreakable™ (nylon), iFlex™ (polyolefin), and Karadent™ (microcrystalline polymer), TCS meets any removable department's needs allowing for the most reliable, functional, and uncompromising aesthetic restorations for patients with missing teeth.

TCS Resins:

• Unbreakable™ (nylon based) & iFlex™ (polyolefin based)- Ideal for Flexible Partials.

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• Karadent™ (microcrystalline polymer)- Ideal for full dentures, clear clasps, & frameworks. Karadent™ combines the strength of nylons with the simplicity of acrylics. Available in Standard Pink & Crystal Clear.

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O2 MED: many colors, much comfort and safety

During the past year, 1Flex Technology, already operating in the dental sector, designed a comfortable surgical face mask, with high filtration efficiency and interesting packaging in order to offer the market a medical device as a response to health and dental professionals' needs: protection, comfort, style. This is how O2MED surgical face masks were conceived: certified and guaranteed products for everybody, with very high quality standards as the results of a totally MADE IN ITALY manufacturing process, which takes place in AHU sanitized environments to ensure the microbial cleanless and absence of irritating an sensitizing agents. Tested tissues, comfortable free latex elastic and adjustable nose bar have been selected to give the best comfort and safety to all those who choose to wear O2MED. 1Flex Technology is also able to offer its clients customized surgical face masks and many colors, for those who want to follow the everyday trend.

www.1flex.it
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Visit us at: IDS 2021, Hall 10.1, Booth G053

FLEX TECHNOLOGY

With its 3DS Intraoral Scanner, Runyes, completes its all around Dental Office equipment offer

With its 3DS Intraoral scanner, Runyes, one of Asia's main manufacturers of dental equipment, entered the digital market in 2017. Runyes 3DS is a well-designed, compact, light, easy to use device, which provides, at an affordable price, to dental professionals, what is needed to acquire a high precision dental impression, in open format files. Upgrades to the scanning software are made available free of charge.
Runyes is beefing up its existing network of distributors, in more than 100 countries, to cope with the particularities of CAD-CAM, while adding experienced partners, and establishing six more Sales Support Centers around the world, in order to be able to provide support in local languages, in the needed time zones.

Runyes FOCUS ON DENTAL

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Lares Research Handpiece Family

Chico, California U.S.A. On August 1, 2020, Lares Research introduced an ergonomic breakthrough- the world's smallest (9.9 cm) and lightest (47 g) prophy handpiece , the Pastel Plus.

The Pastel Plus is significantly quieter and the low pressure start minimizes splatter to optimize your infection control compliance. This innovative addition to the Lares family of handpiece products substantiates their global positioning as a dental handpiece category leader.

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MARKET INSIGHT

ASEAN

ASSOCIATION OF SOUTHEAST ASIAN NATIONS

With 650 million people, the Association of Southeast Asian Nations has the 3rd Largest Population in the World and a GDP of $2.8 Trillion

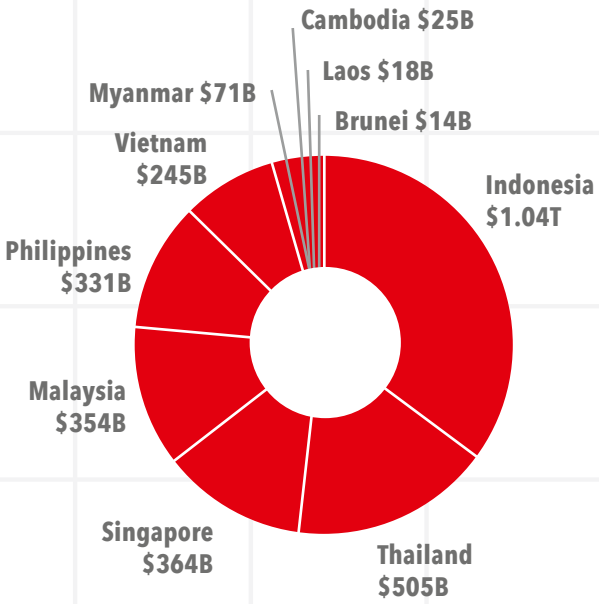
The Association of Southeast Asian Nations (ASEAN) is a regional grouping that promotes economic, political, and security cooperation among its ten members: **Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand**, and **Vietnam**. The group has played a central role in Asian economic integration, spearheading negotiations among Asia-Pacific nations to form one of the world's largest free trade blocs and signing six free trade agreements with other regional economies (Australia-New Zealand, China, India, Japan, Korea, Hong Kong). Yet, ASEAN brings together countries with significantly different economies and political systems: democracies, authoritarian states, and hybrid regimes.

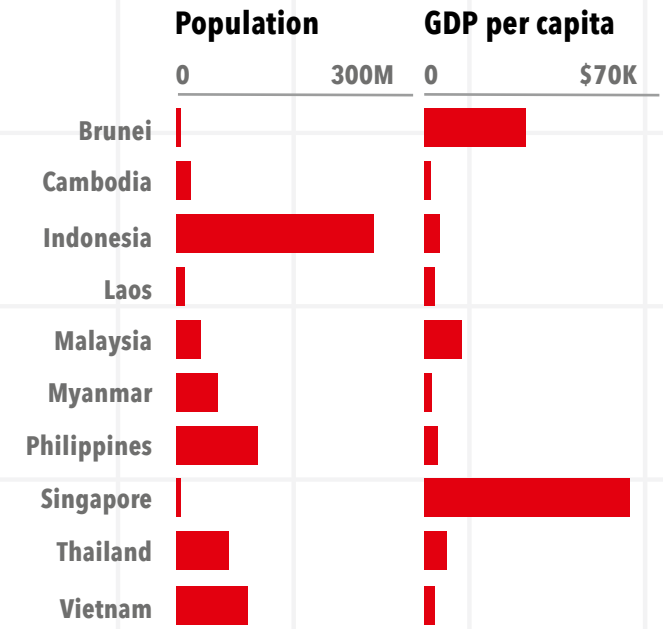
Demographics differ across the region, too, with many religious and ethnic groups represented. In 1992, members created the ASEAN Free Trade Area with the goals of creating a single market, increasing intra-ASEAN trade and investments, and attracting foreign investment. Despite the progress , some of the region's most important industries are not covered by preferential trade measures, and differences in income, as well as international policies, results in a sometimes challenging integration.

Amid the coronavirus pandemic and subsequent economic crisis in 2020, ASEAN countries set up several bodies and mechanisms to procure medical supplies, distribute a COVID-19 vaccine, coordinate economic recovery plans, and facilitate the safe resumption of regional travel. General economic prosperity, aging populations, a growing middle-income population, as well as sensitive public policies have driven demand of better healthcare and infrastructure in Southeast Asia (SEA). A rapidly increasing healthcare demand is also driven by population growth rates that are expected to outstrip those of other geographies, and an epidemiological shift from infectious diseases to a chronic disease pattern matching western markets. Most of SEA's spending on healthcare comes from the public sector (sometimes augmented by state-run insurance funds and personal expenditures), and many of the region's fiscally constrained governments are finding it challenging to meet their citizens' escalating needs. **According to forecasts, the Asia-Pacific region will account for around 40% of the global dentist tourism market in 2023, with rising destinations in countries like Thailand, Malaysia, the Philippines, and Vietnam. As a matter of facts, according to Frost and Sullivan, Asia Pacific's healthcare market is estimated to contribute close to 33% of the global healthcare market and estimated to be valued at $521 billion, with trends in the medical device industry in Asia mainly centered on imaging, cardiovascular, blood pressure monitoring and healthcare IT.** In addition, ASEAN has been developing a uniform system for registering and assessing medical devices across the member countries. Although adherence to the ASEAN Medical Device Directive (AMDD) basic principles will likely only take place in the next few years, this will allow manufacturers to easily access a common medical device market.

ASEAN's Diversity

Gross Domestic product (GDP)





Note: 2018 data
Source: World Bank

COUNCIL on FOREIGN RELATIONS

	Density of Dentists (per 10 000 population) 2010-2019
Brunei	2.5
Cambodia	0.1
Indonesia	0.6
Laos	0.6
Malaysia	3.1
Myanmar	0.7
Philippines	<0.1
Singapore	4.1
Thailand	2.4
Vietnam	1 (per 25,000 population)

World Health Statistics, 2020 WHO

	Life expectancy at birth (years) both sexes	Healthy life expectancy at birth (years)
Singapore	82.9	76.2
Brunei	77.4	67.9
Vietnam	76.3	67.5
Thailand	75.5	66.8
Malaysia	75.3	66.6
Cambodia	69.4	60.8
Indonesia	69.3	61.7
Philippines	69.3	61.7
Myanmar	66.8	58.4
Laos	65.8	57.9

Source: World Health Statistics 2018-2020 WHO

	Total Population, millions	GNI per capita, Atlas method (current US$), 2020	Average, Total Health Expenditure, (% of GDP)
Brunei	433,285 K	32,230	2.42 %
Singapore	5.704	54,920	4.7 %
Indonesia	270.6	3,870	2.9-3.1 %
Malaysia	31.95	10,580	4.4-4.6 %
Thailand	69.63	7,050	4.3-4.6 %
Philippines	108.1	3,430	4.7 %
Vietnam	96.46	2,660	6.8–6.9 %
Cambodia	16.49	1,490	5.92 %
Laos	7.169	2,480	2.53 %
Myanmar	54.05	1,260	4.66 %

GNI= Gross National Income
Source: World Bank 2019-2020

"The dramatic growth of ultra-high net worth individuals in Asia is set to be reinforced by stellar growth rates in several countries, including Vietnam, which is expected to see its ultra-wealthy population rise by 170% to 540 over the next decade – the highest rate of growth in the world. Millionaire numbers are expected to jump from 14,300 to 38,600 over the same period."
This growth rate exceeds neighboring China and India.
(Knight Frank's the Wealth Report)

SOCIALIST REPUBLIC OF VIETNAM

COUNTRY
VIETNAM

- Over the past 30 years, Vietnam's average economic growth rate of 5.5% has been second only to China in Asia.
- According to PriceWaterhouse Coopers predictions, Vietnam will move from the 32nd largest economy to the 20th by 2050.
- Between 2002 and 2018, GDP per capita increased by 2.7 times.
- A young country–only 5.6 % of the population is aged 65 and older, and 42% is under 25.
- As of 8 June 2020, the National Assembly voted to pass and adopt the EU-Vietnam Free Trade Agreement (EVFTA) and the EU-Vietnam Investment Protection Agreement (EVIPA), which will considerably increase trade and investment for pharmaceutical/ medicinal products and medical devices from the European Union, as the result of a 99% cut in tariffs and other trade barriers.

Population:
96.46 million

Political System:
Single-party Socialist Republic

Head of State:
Nguyen Phu Trong

Head of Government:
Prime Minister Pham Minh Chinh

Capital:
Ha Noi

Language:
Vietnamese

Currency:
Dong

In Brief

A Communist country since 1975, Vietnam moved from a closed, centrally planned economy, towards a globally integrated, socialist-oriented market economy. Continued strong economic growth, political stability, and a large population have combined to create a dynamic and quickly evolving commercial environment, resulting in a booming and optimistic middle class (rising from 12 to 33 million people) and affluent class, as well as in the emerging of young and dynamic small and medium-sized enterprises. **Its evolving health system is a mixed public-private provider system based on mandatory social health insurance. Committed to achieving universal health coverage by 2030, today, 87.7% of Vietnam's population are covered by social health insurance with the Government's intent to reach 95% of Vietnamese population by 2025.** Major economic and political reforms have transformed the healthcare landscape of the country providing favorable growth opportunities. Despite low healthcare spending (6.8-6.9% of GDP), Vietnam has achieved remarkable population health outcomes.

Oral health data is very scarce however, due to lack of dental professionals and resources, and a high prevalence of oral health problems among the population, Vietnam's dental care is mainly cure-oriented, less effort is made towards preventative or restorative dental services. Furthermore, the high prevalence of dental caries affecting younger generations will further strain the country's limited dental resources, inevitably increasing demand for dental services. Private dental clinics are increasing rapidly. Dental equipment is quite entirely supplied by imports as dental equipment manufactured domestically is limited to furniture and simple equipment.

Dentist to population ratio	1:25,000
No. of public dental clinics (or health facilities offering dental care), 2012	1,790
Dental schools	8
No. dental graduates per year	500

Prevalence of caries in general population	67%
Periodontal disease in general population	72%
Ratio of babies born with cleft lip and/or cleft palate	1:500
7–17-year-olds with dental caries	85%
2-6-year-olds with dental caries, 2015-2018	90%

Source: National Oral Health Survey, 2009

Dentition Status of Adult Population (+ 18)

	DMFT Average	Prevalence (%)
Total	**4.98**	**81.3**
Residential Status:		
Urban	6.14	84.7
Rural	4.87	80.3
Age group:		
18-34	3.29	76.2
35-44	4.69	82.3
45+	8.39	89.6
Last Dental visit:		
Never	4.00	74.5
2+ years ago	6.64	84.4
Past 2 years	5.72	91.4

DMFT=decayed, missing and filled teeth
Source: National Oral Health Survey 1999

Permanent Dentition Status of Vietnamese Children

	Mean DMFS	Prevalence (%)
Total	**2.47**	**53.1**
Residential Status:		
Urban	2.70	55.1
Rural	2.40	52.6
Brushing Frequency (times/day):		
at least once a day	2.43	50.0
Two or more times a day	2.63	56.6
Age group (years):		
6-7	0.42	19.7
8-9	1.10	40.7
10-11	1.92	59.1
12-13	3.02	59.1
14-15	4.03	71.8
16-17	4.20	69.0
Last Dental visit:		
Never	1.84	48.4
2+ years ago	2.14	52.0
Past 2 years	3.86	60.7

Source: National Oral Health Survey 1999

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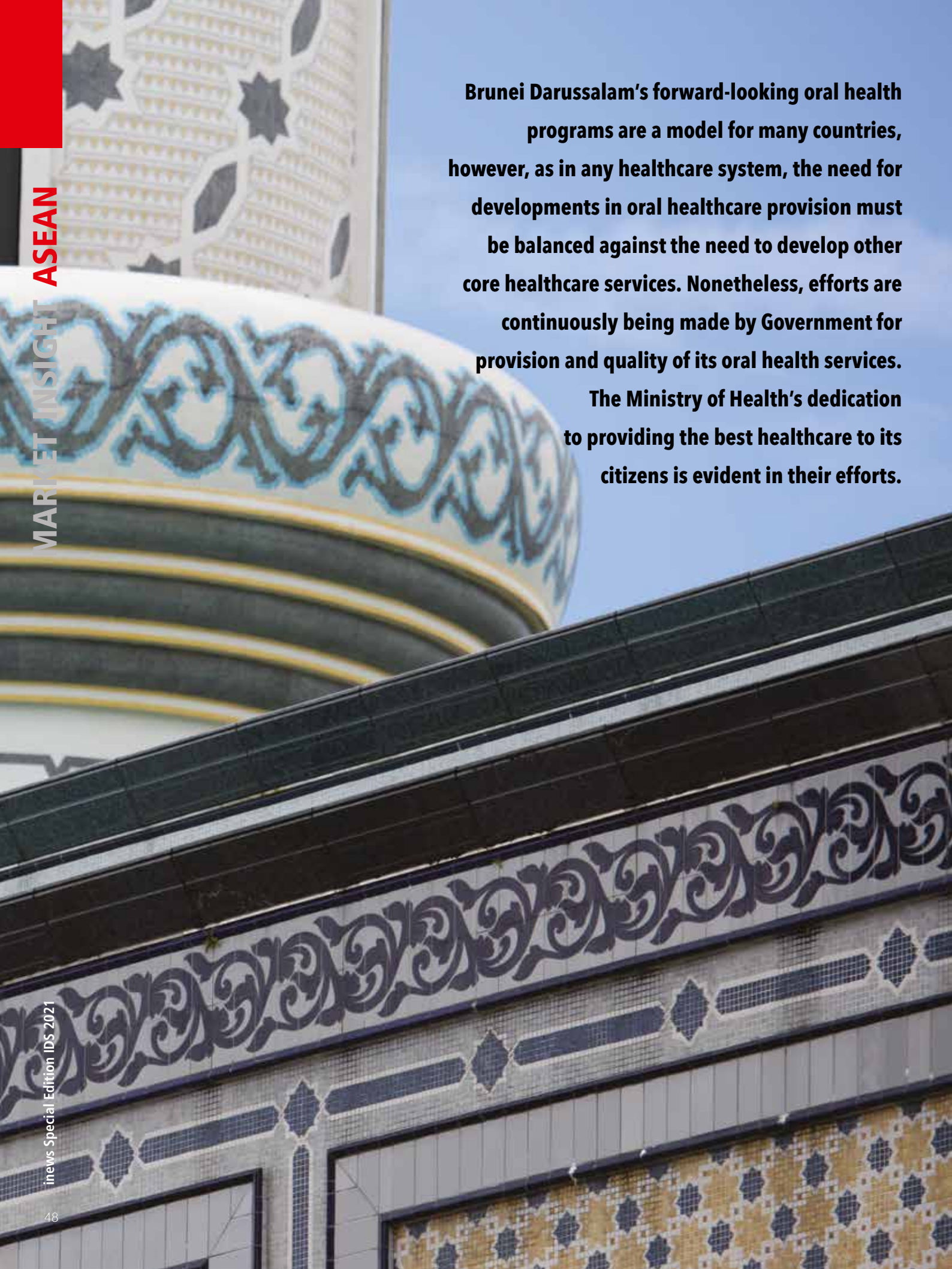


Brunei Darussalam's forward-looking oral health programs are a model for many countries, however, as in any healthcare system, the need for developments in oral healthcare provision must be balanced against the need to develop other core healthcare services. Nonetheless, efforts are continuously being made by Government for provision and quality of its oral health services. The Ministry of Health's dedication to providing the best healthcare to its citizens is evident in their efforts.

SULTANATE OF **BRUNEI** DARUSSALAM

COUNTRY

BRUNEI

- Brunei Darussalam (officially, the *Nation of Brunei, the Adobe of Peace*, in Malay: *Negara Brunei Darussalam*), a Sultanate with a Malay Islamic Monarchy, gained its independence from the U.K. in 1984.
- The Sultan of Brunei is one of the world's longest-reigning and few remaining absolute monarchs, implementing a combination of English common law and sharia law.
- Second-highest Human Development Index among the Southeast Asian nations, after Singapore.
- More than 80% of the population, including the majority of Bruneian Malays and Kedayans, identify as Muslim.
- Given that energy reserves are becoming depleted, the Government has been pursuing a policy of economic diversification, speeding up investments in the manufacturing and the service sectors, further marketing itself as a financial center and opening numerous tourist facilities.
- Over the past two decades there has been an influx of foreign workers to Brunei making up around 40% of the country's population.

Population:
433,285

Political System:
Absolute monarchy

Head of State and Head of Government:
His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah (reigning since 1968)

Capital:
Bandar Seri Begawan

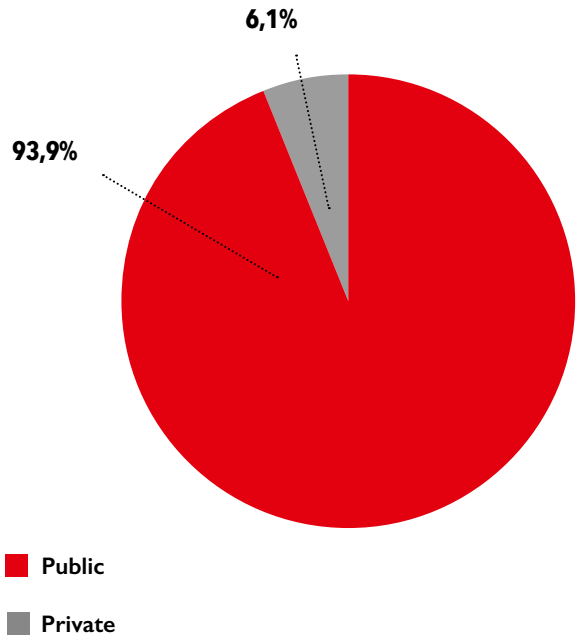
Language(s):
Malay, English

Currency:
B$ (Brunei Dollar)

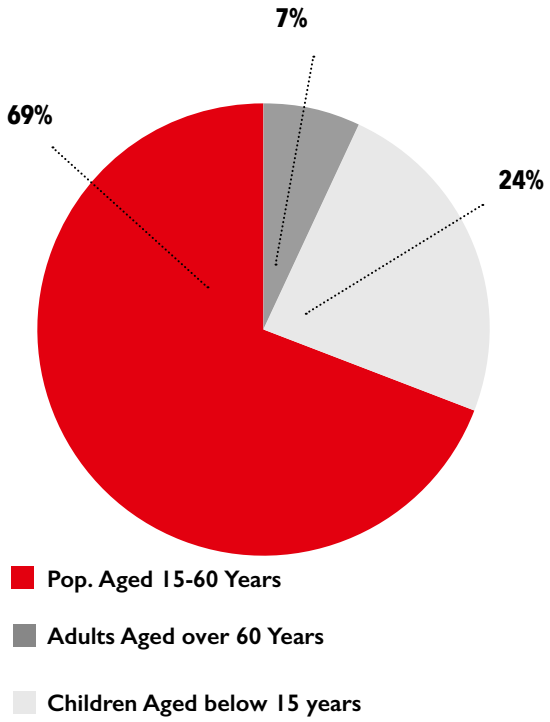
In Brief

Thanks to its plentiful reserves of oil and natural gas, Brunei's citizens enjoy one of the world's highest standards of living, boasting one of the highest per capita GDP in the world, including high standard healthcare and medical services provided by the government. Citizens pay no income taxes, and the Government guarantees free medical services and education up to university level and gives housing and rice subsidies. **The country instituted the single-payer universal healthcare for its citizens in 1958. Its health system is classified as a Beveridge Model, although funding comes from alternative government revenue sources and not citizen taxation.** Thus, public healthcare services, including oral health, are either free or offered by the government at highly subsidized rates, including medicines for inpatients and outpatients. Despite this however, only 30% of the population seeks dental treatment and, according to the National Oral Health Survey (2015-2017), two-thirds of the country's people suffer from untreated tooth decay. Oral hygiene practices are far from ideal and oral health awareness is relatively low. Although growing, its private sector remains underdeveloped (3% of GDP), and private dental services are available at 2 private institutions, as well as 7 clinics, with most dental workforce working in the public sector. Great efforts are being made on several fronts to promote oral health. The country is a large importer, including of medical products. As Brunei's young population ages and requires medical care, the medical industry will be an important long-term growth sector for Brunei's economy.

Public vs Private Share of Total Health Expenditure



Population by Age



Numbers of Specialist Dental Practitioners and Oral Health Workforce in Brunei Darussalam (2010)

Orthodontics	6
Paediatric dentistry	5
Oral surgery	4
Prosthodontics	3
Endodontics	2
Periodontics	2
Restorative dentistry	1

Dental hygienists and therapists[1]	44
Dental nurses[2]	74
Dental Surgery Assistants[3]	93
Dental laboratory staff[4]	38
Administrative and support staff[5]	45

Note: [1] Dental Hygiene and Therapy training program, provided in conjunction with King's College London, UK.
[2] School dental nurses are qualified to provide primary dental care to children, working predominantly in school-based clinics.
[3] Dental surgery assistants support dentists, dental therapists, dental hygienists and dental nurses in the provision of dental services.
[4] Including 19 technicians, 7 technologists, 9 trainee technicians and 6 possible future trainees.
[5] The delivery of dental services by the Ministry of Health in Brunei Darussalam is supported by a administrative and support staff, Chief Executive Officer, hospital administrator, reception staff and attendants who serve as clinical assistants and 'runners' in major dental clinics.

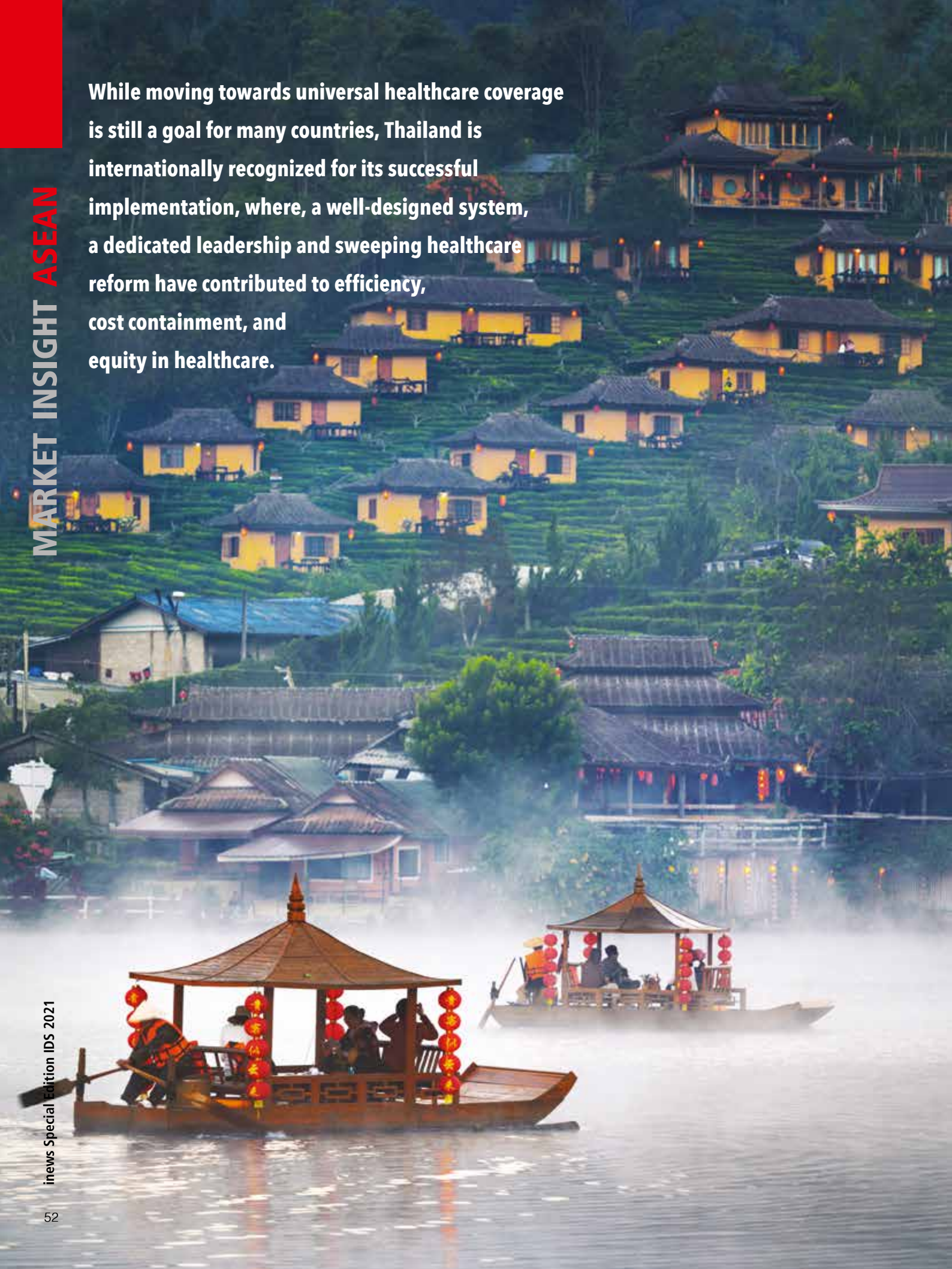
Dentist-Population Ratio in Brunei Darussalam (as of 2015)

Total no. of dentists	between 94-106
Total dentist : population ratio	1:3670
Bruneian nationality	59% approx.
Local dentist : population ratio	1 : 5202
Other nationalities	41% approx..
Female dentists	71%
Male dentists	29%

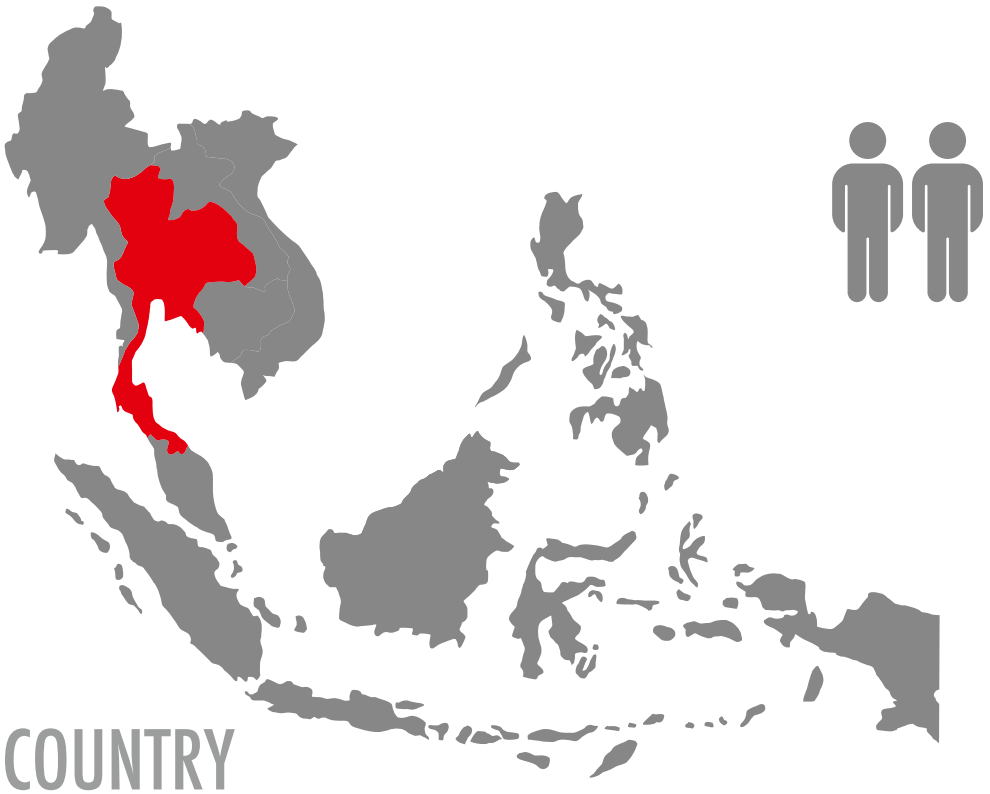
AGE	DMFT** 1999	DMFT 2015-2016	ORAL HEALTH STATUS Brunei Darussalam National Oral Health Survey 1999	ORAL HEALTH STATUS Brunei Darussalam National Oral Health Survey 2015 - 2016	ORAL HEALTH STATUS Civil Services Employees Brunei Darussalam 2008*
5 to 6 years	7.1	5.1	11.3% caries-free	25.9% caries-free	-
12 years	4.8	0.9			-
35 to 44 years	14.4	9.7	1.7% caries-free		DMFT 9.9

*Notes: *In 2008, an Integrated Health Screening Program for Civil Service Employees was conducted. DMFT score for 35-44-year-old was recorded as 9.9, with 50.3% of teeth extracted.*
***DMFT= D-Decayed; M-Missing; F-filled; T- Teeth.*
Source: Ministry of Health of Brunei - http://www.moh.gov.bn/SitePages/MRA_oralHealthStatus.aspx

While moving towards universal healthcare coverage is still a goal for many countries, Thailand is internationally recognized for its successful implementation, where, a well-designed system, a dedicated leadership and sweeping healthcare reform have contributed to efficiency, cost containment, and equity in healthcare.



THE KINGDOM OF **THAILAND**



COUNTRY

THAILAND

- Just behind Indonesia, the Philippines and Vietnam, Thailand has the 4th largest population amongst South-East Asian nations.
- Based on national estimates, poverty declined substantially over the last 30 years from 65.2% in 1988 to 9.85% in 2018.
- Thailand is gaining worldwide recognition for the quality of its healthcare services, after the US magazine CEOWORLD placed Thailand sixth in its 2019 list of countries with the best healthcare systems.
- As of 2017, the current health expenditure per capita was USD 247, primarily funded by general income tax.
- Thanks to its high reputation of quality medical treatment at reasonable costs, Thailand is a leading Asian country for medical tourism growing over 10% each year.
- The proportion of citizens aged over 60 is one of the highest in the ASEAN region. By 2045, such proportion is forecasted to exceed that of other regions such as Europe and the United States, further driving domestic healthcare demand in the decades ahead.
- Its medical devices sector is the 8th largest market in the Asia-Pacific region, and it is expected to grow 8-10% per year due to aging population.
- The pandemic impact over Thailand's strong economic growth is forecasted to be among the sharpest in the East Asia and Pacific region.

Population:
69.63 million

Political System:
Unitary parliamentary constitutional monarchy

Head of State:
His Majesty King Maha Vajiralongkorn Bodindradeba-yavarangkun

Head of Government:
Prime Minister General Prayut Chan-o-cha

Capital:
Bangkok or "Krung Thep"

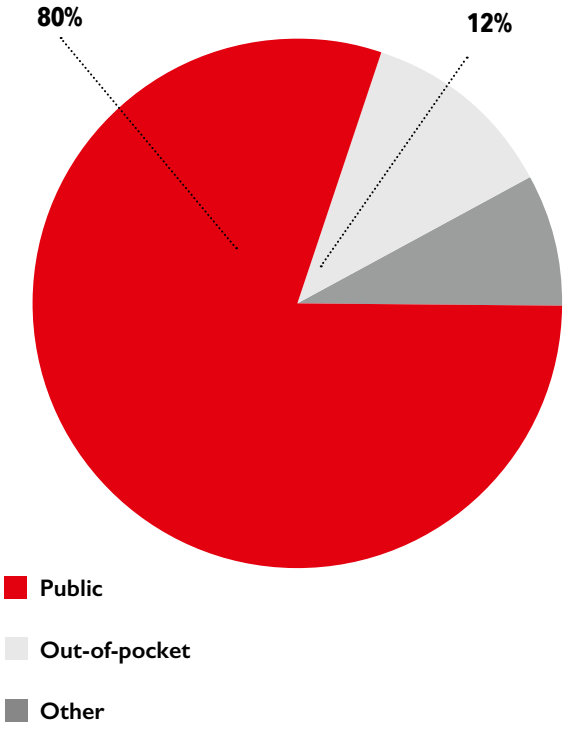
Language(s):
Thai

Currency:
Baht

In Brief

Financed through general taxation, without relying on contribution from members, Thailand's Universal Health Coverage Scheme is described as one of the most ambitious healthcare reforms ever undertaken in a developing country, providing 98% of Thai citizens, through three health insurance coverage schemes, all essential services in preventive, curative, and palliative care for all age groups, free at the point of service with low prevalence of unmet needs.

Thanks to government's supportive policies, Thailand has turned into a medical hub for Asia and beyond. Rising standard of living, growing urbanization and an expanding middle class are supporting the growth of dental clinics as well as increased expenditure on dental care services primarily for dental cosmetics and oral care products. Even if oral health is offered at public clinics, the private sector plays an important role, especially in Bangkok and municipality areas. Thailand's aging society and the rising number of international tourists are main growth drivers for expansion of premium medical and dental clinics, especially in Bangkok and critical spots for tourism. For dental clinics in rural areas, the rising number of dentistry graduates and the government initiative of "One District One Dentist" would be the primary growth driver of the expansion of the dental industry. Although most dental products are imported into Thailand, oral care products, such as toothpaste or dental consumable products, are mainly supplied by domestic manufacturers. Thailand ranked as the world's 17th largest exporter of medical devices (mostly single-use devices) and the world's 32nd importer of medical devices.



Top 5 Product Groups Exported and Imported by Thailand

	Export 2018	Import 2018
1st	Single-use Devices	Electro-Mechanical Medical Devices
2nd	Ophthalmic and Optical Devices	In Vitro Diagnostic Devices (IVD)
3rd	Electro- Mechanical Medical Devices	Single-use Devices
4th	Dental Devices	Ophthalmic and Optical Devices
5th	Hospital Hardware	Hospital Hardware

Source: Medical Devices Intelligence Unit, Office of Industrial Economics, Ministry of Industry, as of 2018

	2010	2015	2019	2025 est.
Number of dentists	11,847	13,215	16,547	24,922
Dentist to population ratio		1:4,913		1:3,395
Number of dental clinics			4,556 (2017)	
Number of Dental Prosthetic Technicians			5,375	
Dental Assistants and Therapists			6,981	

Note: number are approximate. Each source, even if reliable, has slightly different numbers
Main source: World Health Organization (WHO) https://apps.who.int/gho/data/node.main.HWF2 / world data Atlas

DENTAL COVERAGE WITHIN THE THREE NATIONAL INSURANCE SCHEMES

1. Universal Coverage Scheme (UCS)

Thai citizens under the Universal Coverage Scheme (those not covered by SHI or CSMBS) are eligible to have free preventive and curative dental services covering the following:

- Dental Treatment:

-Filling
-Extraction
-Scaling
-Plastic Prosthesis
-Baby Tooth Treatment-
-Nasoalveolar Molding for Child who has Cleft Lip and Cleft Palate

- Oral Health Protection and Support:

-Oral Health Check Up
-Dental Consultation
-Supplemental fluoride for person who is at risk of tooth decay
-Dental Sealant

2. Social Health Insurance Scheme (SHI)

Under the SHI, Thai Citizens (private sector employees) have the right for dental services covered under following criteria:
In the case of tooth filling, extraction, and scaling, approx. Baht 250 will be covered per one time of service.
The cost must not exceed Baht 500 per year.
In case of acrylic dentures;
-1-5 teeth; Baht 1,200 to cover the cost within five years from installing dentures
-More than five teeth; Baht 1,400 to cover the cost within five years from installing dentures

3. Civil Servant Medical Benefit Scheme (CSMBS)

Public servants and government officers have the right to withdraw funds to cover dental services for standard treatments such as tooth extraction, filling, and scaling (no limitations specified).
Orthodontics care is also included but only in case of an accident.

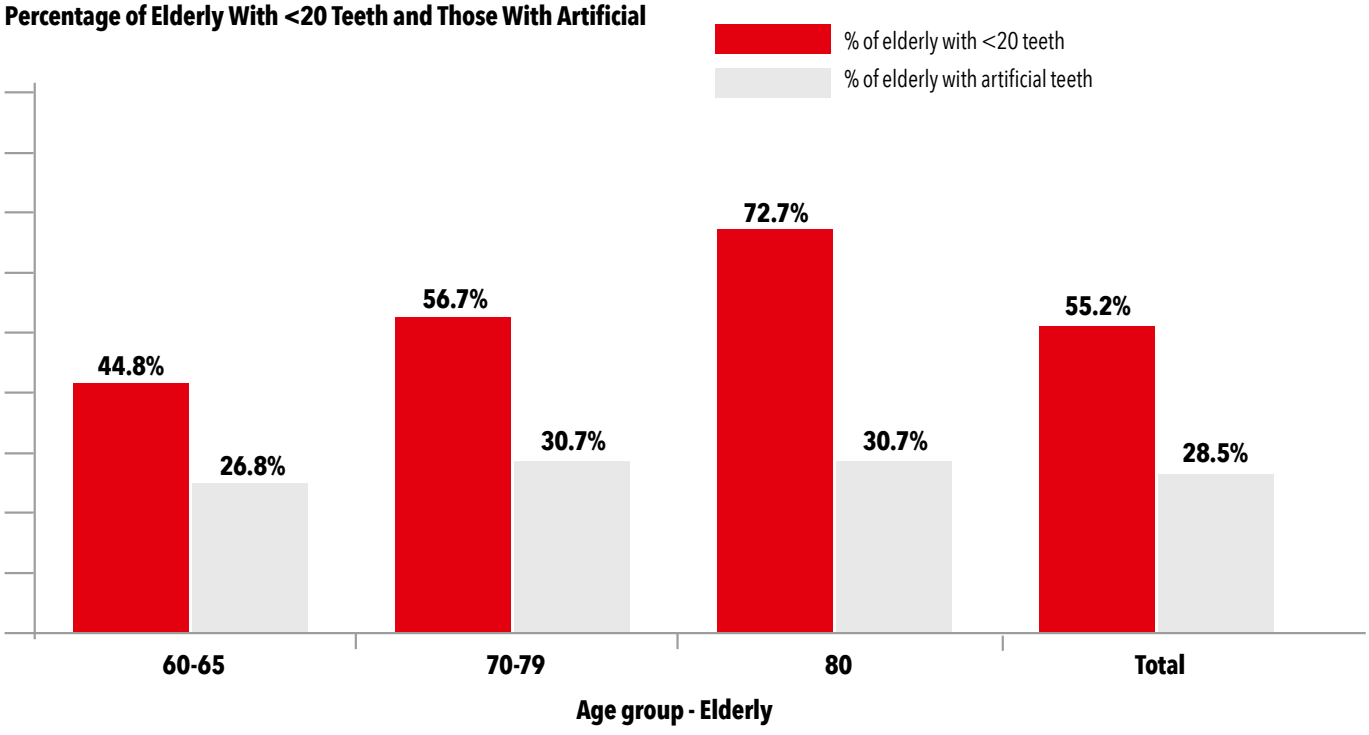
Source: www.unidi.it/images/documenti/Final_Report_Dental_Thailand_gen_2019.pdf / The Kingdom of Thailand, Health System Review (Health System in Transition, Vol. 5 No. 5 2015).

Study years, Training institutions, Regulatory bodies, and Degrees

Health professional	Schools	Study Duration (years)	Regulatory body	Degree
Dentist	10 Dental schools (9 public, 1 private)	6	Thai Dental Council	Bachelor: Doctor of Dental Surgery (DDS)
Nurse	75 nursing schools (65 public, 10 private)	4	Thailand Nursing and Midwifery Council	Bachelor: Registered Nurse (RN)

Source: The Kingdom of Thailand, Health System Review (Health System in Transition, Vol. 5 No. 5 2015)

Percentage of Elderly With <20 Teeth and Those With Artificial



Source: Thailand National Health and Examination Survey 2014

Socioeconomic Inequality and Dental Caries Among Thai Working Age Population (National Oral Health Survey, 2013)

Variables	n=1,518	%
Gender:		
-Male	726	47.8
-Female	792	52.2
Area of residence:		
- Bangkok	134	8.8
- Other urban	465	30.6
- Rural	919	60.5
Region of residence:		
- Central	317	20.9
- North	257	16.9
- Northeast	554	36.5
- South	256	16.9
- Bangkok	134	8.8
Occupation:		
- Business	191	12.6
- Wage-earner/freelance	310	20.4
- Agriculture	568	37.4
- Housekeeper	90	5.9
-Others*	359	23.6

Behaviors	n=1,518	%
Frequency of tooth brushing		
- Less than 2 times/day	127	8.4
- At least 2 times/day	1,391	91.6
Use of fluoride toothpaste:		
- No	197	13.0
- Yes	1,317	87.0
Use additional cleaning tools:		
-No	1,355	89.3
-Yes	163	10.7
Smoking status:		
-Smoker	422	27.8
-Non-smoker	1,096	72.2

Access to dental service	n=1,518	%
Frequency of dental visit:		
- Less than once a year	945	62.3
- At least once a year	573	37.7
Place for dental service:		
- Public provider	443	76.0
- Private provider	140	24.0
Health insurance coverage:		
- CSMBS	206	13.8
- SHI	226	15.2
- UCS	1,058	71.0
Oral health outcome	**n=1,518**	**%**
Dental caries:		
0	984	64.8
≥1	534	35.2

Note: SHI=Social Health Insurance Scheme; CSMBS=Civil Servant Medical Benefits Scheme; UCS Universal Coverage Scheme
**Others in occupational groups include employee/government worker, associates of network/clubs, elderly with income, studying and finding a job.*

Year	1999	2006	2012
3-year-old children			
Total number	14,485	2,016	2,376
Caries prevalence (%)	65.7	61.4	51.7
dmft	3.6	3.2	2.7
5-6 years old			
Total number	24,484	1,856	2,456
Caries prevalence (%)	87.4	80.60	78.5
dmft	5.97	5.43	4.4
12 years old			
Total number	35,623	2,000	2,312
Caries prevalence (%)	57.3	56.87	52.3
DMFT	1.64	1.55	0.7

Note: dmft = decay-missing-filled teeth
Source: taken from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5694148/

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With its functional and unique healthcare system, Singapore adopts a modified national insurance scheme, achieving similar outcomes to most developed countries, with less spending, less over consumption and less over-servicing.

REPUBLIC OF **SINGAPORE**

COUNTRY **SINGAPORE**

- Widely regarded to have an incorrupt and meritocratic government, with a fair judiciary and strong rule of law, the government has significant control over politics and society.
- Singapore's economy is expected to shrink by between 4.0% and 7.0% this year, the third official downgrade in economic forecasts by the Ministry of Trade and Industry this year, also due to the Covid-19 outbreak.
- Seventh-highest GDP per capita in the world.
- Tenth-highest number of billionaires of any city in the world.
- Placed highly in key social indicators: education, healthcare, quality of life, personal safety and housing, with a home-ownership rate of 91%.
- Fastest Internet connection speeds in the world.
- Major financial and shipping hub, consistently ranked the most expensive city to live in since 2013, has been identified as a tax haven.
- A 2016 report published by Lancet medical journal has placed Singapore in the top ranks for global healthcare, along with Iceland and Sweden.
- Among its ASEAN peers, Singapore spends the most annually in healthcare on a per capita basis (USD 2,752) and this is expected to rise faster than GDP given the aging population and changes in demographics.

Population:
5.704 million

Political System:
Parliamentary Representative Democratic Republic

Head of State:
President Halimah Yacob

Head of Government:
Prime Minister Lee Hsien Loong

Capital:
Singapore (city-state)

Language(s):
English, Malay, Mandarin, Tamil

Currency:
S$ (Singapore Dollar)

In Brief

Increasingly acknowledged for having achieved excellent healthcare outcomes at modest cost, differently from most countries, Singapore adopts a modified national insurance scheme: a mandatory saving and insurance program in which universal health coverage is funded through a combination of government subsidies (from general tax revenue), multilayered healthcare financing schemes (known as the "3Ms" system-*Medisave, MediShield,* and *Medifund*), and private individual savings, all administered at the national level. Dental treatments are generally not claimable under the Medisave scheme unless the treatment involves surgery and is performed due to medical reasons (gum surgery, sinus lift, bone graft, surgical removal of retained roots/fractured teeth, wisdom tooth surgeries, dental implants).

Renowned for its role as a healthcare hub for the region, offering Asia's best healthcare system, Singapore is one of the most attractive countries for the medical device sector, with foreign companies supplying around 85% of health equipment. Demand for medical equipment comes from public and private hospitals with the Health Ministry accounting for nearly 70% of local demand. At present, more than 75% of products imported into Singapore are subsequently re-exported. According to reports, nearly 45% of the population visits the dentist at least twice a year although there is public concern about the rising dental treatment fees. Besides serving a more affluent and demanding resident population, dental practitioners are seeing a marked increase in foreign patients seeking dental treatment.

Public Dental Clinics, 2019	**Total 246**
Polyclinic Dental Clinics	10
Hospital/Institution Dental Clinics	8
School Dental Clinics	228
Private Dental Clinics, 2019	**Total 851**

Source: Ministry of Health Singapore

	2017	2019
Total no. Of Dentists	**2,293**	**2,475**
Public	477	509
Non-Public	1,748	1,881
Not in Active Practice	68	85
Dentist to population ratio	1:2,448	1:2,304
Dentist per 1,000 population	0.4	0.4

Source: Ministry of Health Singapore

	2017	2019
Total No. of Oral Health Therapists	**416**	**429**
Public	225	224
Non-Public	144	141
Not in Active Practice	47	64
Dental Hygienist/Dental Therapist** (2020)		2,547
Dental Technicians (2013)		**345**

Source: Ministry of Health, Singapore / Singapore Dental Council, https://prs.moh.gov.sg/prs/internet/profSearch/main.action?hpe=SDC/World Health Statistics, WHO
Note: Registration of Oral Health Therapists started in 2008.
*** Dental nurses/hygienists were re-designated as Dental Therapists and the certificate in dental nursing program was renamed as the certificate in Dental Therapy Program (2000)*

	2015	2017
No. of Dental Schools	89	89
No. of Dentists Graduated**	51	56
No. of Oral Health Therapists Graduated***	17	24

*Source: Ministry of Health, Singapore, **NUS Faculty of Dentistry graduates*
*** NYP Dental Hygiene and Therapy graduates. The first batch of Oral Health Therapists graduated in 2008.*

	2017	2019
Total No. of General Dental Practitioners	**1,943**	**2,107**
Public	365	379
Non-Public	1,516	1,664
Not in Active Practice	62	84
Total No. of Dental Specialists	**350**	**368**
Public	112	130
Non-Public	232	237
Not in Active Practice	6	1
By Specialties (year 2020):		
Dental Public Health		4
Oral & Maxillo-Facial Surgery		68
Pediatric Dentistry		27
Prosthodontics		67
Endodontics		49
Orthodontics		108
Periodontology		47

Source: Ministry of Health, Singapore and Singapore Dental Council https://prs.moh.gov.sg/prs/internet/profSearch/main.action?hpe=SDC

PUBLIC SURVEY

The Singapore Dental Association (SDA) appointed Standing Committee commissioned an independent public survey in August 2019 to study the confidence of the public in dentists, the public's concern on dental costs and also to gauge the public confidence of practicing dentists in Singapore in relation to safety and performance. The survey results have revealed the following:

- 76% of the respondents were concerned about the rising cost of living in Singapore.
- 89% of respondents were concerned about the cost of dental care in Singapore.
- None of the respondents who had seen a dentist over the last one year had filed any complaints against their dentists.
- All respondents who had visited a dentist at least once in the last year said their dentists are competent with their work.
- 71% of the respondents visit private dental practitioners whilst 29% of the respondents visit public healthcare with some voicing concern. about the long waiting periods for healthcare in the public institutions.
- Of the 89% of respondents who were concerned about cost of dental care, one third of them said they would try to seek alternative routes of receiving dental care e.g. heading to Johor Bahru or Bangkok for treatment if there is further increases in the cost of dental treatment. Some added that they may turn to public healthcare institutions.
- 17% of the respondents have not visited their dentists for the past three years.

Note: The public survey interviewed a total of 1,438 members of the public aged between 25 to 60 years old, consisting of 1,412 Singaporeans and 26 Permanent Residents, in areas such as Choa Chu Kang, Bukit Batok, Tampines, Pasir Ris, Bedok, Bukit Panjang, Ang Mo Kio, Jurong, Telok Blangah, Bukit Timah, Boon Keng, Hougang, Woodlands, Yishun, Potong Pasir, Bishan, Siglap, Sengkang and Punggol.

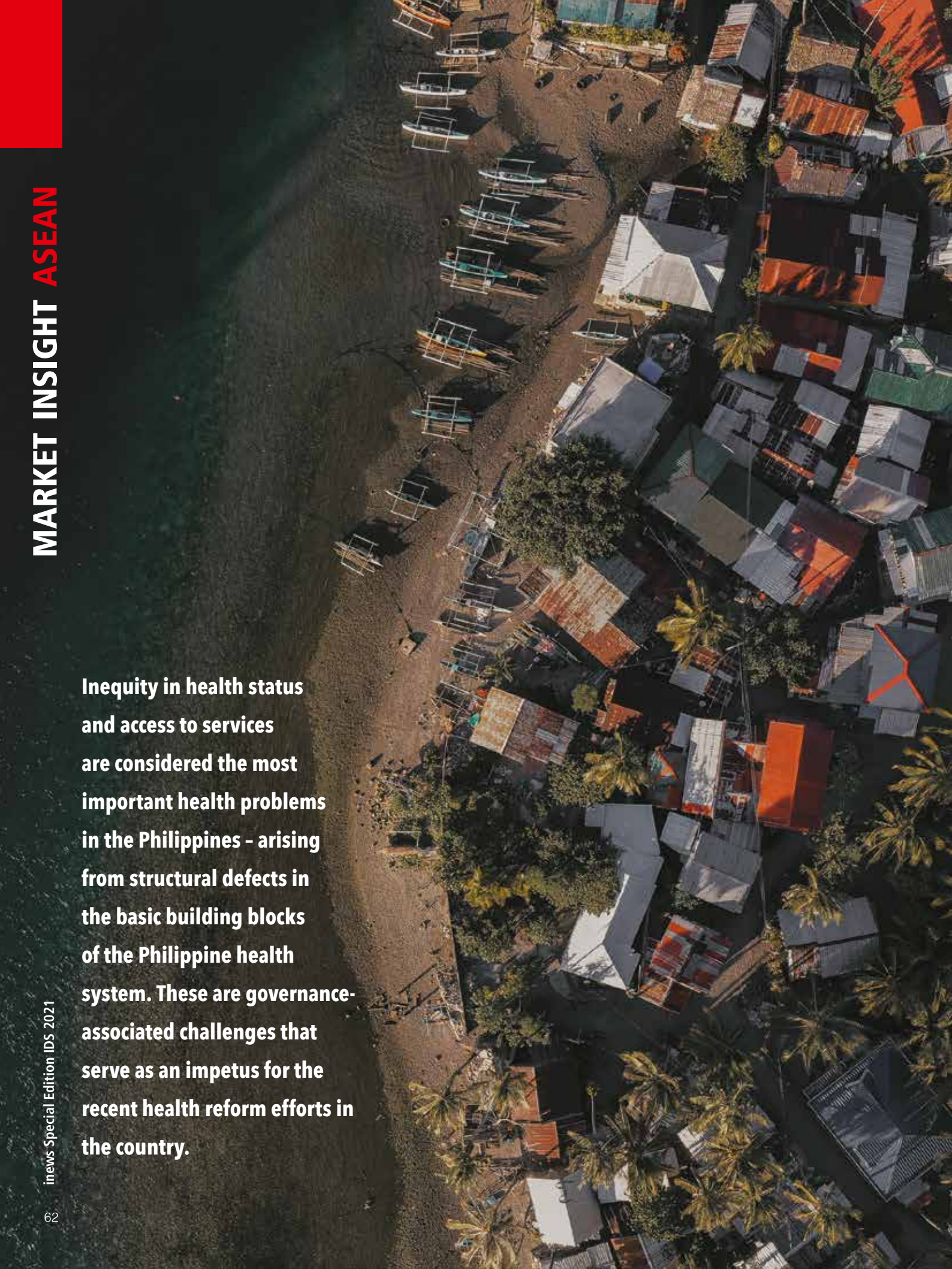
Visit to a dentist, at least twice a year	45%
Visit to a dentist, at least once in two years	39%
DMFT Index in 2-year-old children	0.41
Caries prevalence among 3-6-year-old children	40%
Caries prevalence among 18-48-month-old infants	48%
Edentulous aged 60 and above	31%

Note: DMFT= Decayed, Missing and Filled Teeth

Severe to Chronic Periodontitis (estimates of average prevalence among those 15-years or older per country, 2010)

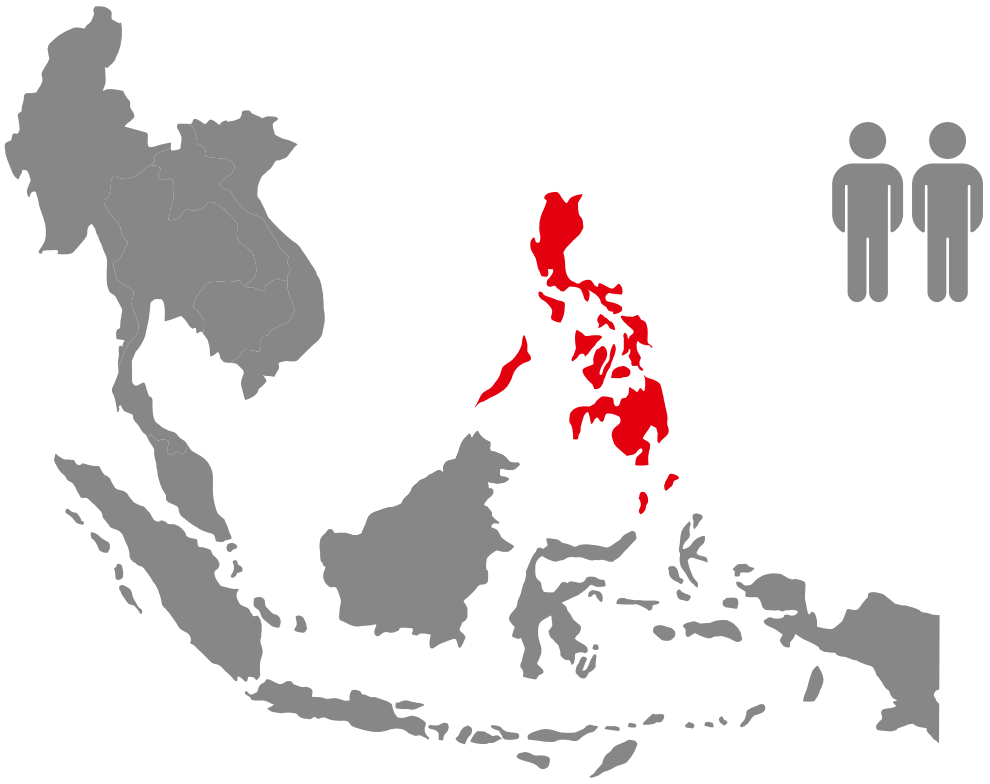
Singapore	more than 15.0%
Indonesia	more than 15.0%
Malaysia	10.1%-15.0%
Philippines	10.1%-15.0%
Cambodia	10.1%-15.0%
Laos	10.1%-15.0%
Myanmar	10.1%-15.0%
Thailand	10% or less
Vietnam	10% or less

Source: The Oral Health Atlas 2015, FDI "The Challenge of Oral Disease"



Inequity in health status and access to services are considered the most important health problems in the Philippines – arising from structural defects in the basic building blocks of the Philippine health system. These are governance-associated challenges that serve as an impetus for the recent health reform efforts in the country.

REPUBLIC OF THE **PHILIPPINES**



COUNTRY

PHILIPPINES

- Thirteenth most populous country in the world.
- Currently one of Asia's fastest-growing economies, a strong performer in the Region, trailing only China and Vietnam.
- Thirty-ninth largest economy in the world, according to IMF statistics, also considered to be one of the emerging markets.
- Categorized as a newly industrialized country, it is transitioning from one based on agriculture to one based more on services and manufacturing.
- Per capita health spending, US$ 328.9.
- Health Expenditure as % of GDP is 4.7%, compared to 2.9% in Indonesia, 4.3% in Thailand and 6.9% in Vietnam.
- Second worst rate of decayed, missing and filled teeth in Asia, next only to Brunei.

Population:
108.1 million

Political System:
Presidential, representative, and democratic republic

Head of State and Head of Government:
President Rodrigo Roa Duterte

Capital:
Manila

Language(s):
Filipino, English, Spanish

Currency:
Peso

In Brief

The Philippine health system is characterized as a dual health system composed of the public sector and the private sector. The public sector is largely financed through a tax-based budgeting system, where health services are delivered by government facilities. The private sector is largely market-oriented where healthcare is generally paid for through user fees at the point of service. **The introduction of a compulsory Social Health Insurance (PhilHealth) in 1995, and its recent rapid expansion, is seen as a positive development in terms of achieving Universal Health Coverage. PhilHealth reportedly covers 92% of the population, 40% of which is the poor population and subsidized by the Government for premium payments.** Covered services are focused on inpatient care and inadequate outpatient care that only covers the poor members of PhilHealth, with out-of-pocket payments continuing to be the dominant source of financing for healthcare (53.7% of total expenditure). Updated dental statistics and data are lacking however, there is a shortage of dentists and dental services in many parts of the country. Even if basic dental care services are offered by local governments, a 2011 national survey found that 77% of Filipinos had never been to a dentist, mainly due to limited access to oral hygiene, a general lack of awareness and for economic reasons. This behavior further justifies the 9 million denture wearers in the country, particularly partial dentures, the highest number in Asia. A growing issue is lack of oral care among the youth. The Philippines are far behind other countries in the Western Pacific Region as regards prevention and basic oral care.

Never been to the dentist	77% of population
Suffering from dental caries	87%
Visit a dentist only when pain is experienced	53%

Source: National Oral Health Survey, 2011

Children aged six and below with some form of tooth decay	97%
Average decayed teeth in six-year-olds	8
Six-year-olds that have never been to a dentist	20%
Children under 12 years with some form of tooth decay	78%
12-year-olds suffering from gingivitis	74%

Source: Philippine Dental Association

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With its low-cost healthcare system, funded through general revenue, Malaysia provides universal and comprehensive high-quality public healthcare services to its population.

As a result of continuous investments to improve standards of care, and programs targeting rural and low-income patients, Malaysia's healthcare system is fast becoming one of the leading healthcare providers in Asia.

MALAYSIA

COUNTRY

MALAYSIA

- Upper-middle-income economy with third highest purchasing power per capita in the 10- member Association of Southeast Asian Nations (ASEAN).
- Malaysia's healthcare expenditures are expected to double to $28 billion by 2028.
- Its 2020 annual national budget, approximately $7.3 billion (10% of the total) is allocated to public healthcare, including funds for a holistic public-private electronic medical record system with RM31 million (US$7.4 million) allocation for 2020.
- Malaysia's imports of the medical device industry were USD$1,13 billion in 2019. Top exporters of medical devices to Malaysia are the U.S., Japan, Germany, Singapore, China, Mexico, South Korea, France, Switzerland, Netherlands, and Thailand.
- Although Malaysia's public-to-private healthcare consumption ratio is almost equally distributed, spending is shifting to the private sector.
- World's largest medical gloves producer, its imports are mainly higher category of medical devices not manufactured locally.

Population:
31.95 million

Political System:
Federal representative democratic constitutional monarchy

Head of State:
His Majesty Seri Paduka Baginda The Yang Di-Pertuan Agong Al-Sultan Abdullah Ri'ayatuddin Al-Mustafa Billah Shah Ibni Almarhum Sultan Haji Ahmad Shah Al-Musta'in Billah

Head of Government:
The Honourable Tan Sri Muhyiddin Haji Mohd Yassin

Capital:
Kuala Lumpur

Language(s):
Malay, English, Chinese, Tamil

Currency:
Ringgit

In Brief

Malaysia has a dual-tiered system of healthcare services: a government funded public sector (universal healthcare), and a thriving private sector creating a dichotomous, yet synergistic, public-private model. The public sector caters to the bulk of the population (65%) but is served by just 45% of all registered doctors, and even fewer specialists (25-30%). The heavily subsidized public sector is almost entirely borne by budget allocations, with patients paying only nominal fees for access to both outpatients and hospitalizations. The private sector on the other hand, has grown tremendously over the past 25 years. Public services have not kept pace with population growth in urban areas and those with higher purchasing power rather use private services, which leaves the public sector with poorer and sicker patients. Medical tourism is an important part of Malaysia's economy, including dentistry.

In oral healthcare, the balance private-public sector has reverted back to the government sector since 2008, with majority of dentists (63.7%) working for the government, also as part of their compulsory service in the public (before shifting to the private), or postgraduate education and training opportunities supported by an attractive remuneration scheme. Public care is heavily subsidized, and all Malaysians are eligible to receive publicly funded basic dental services with priority given to elderlies, disadvantages groups, as well as pre and schoolchildren, and antenatal mothers who receive it at no charge. Private dental clinics mostly (80%) are single-practitioner practices, with around 45% of them in the urbanized states of Selangor and the Federal Territories of Kuala Lumpur and Putrajaya.

No. of Dental Clinics	1,670-1,692 incl. dental clinics and boats (Ministry of Health)	2,311 (Private)
No. of Registered Dental Surgeons	10,974	
No. of Active Dentists	8,598	
Dentists working in the public/private	5,736 (Public)	2,862 (Private)
Dentist to Population Ratio, 2017	1: 3,728	
Dentists' gender	5,877 Female	2,743 Male
No of dental schools, 2010	13	

Source: Ministry of Health, 2008d, Malaysian Dental Council, annual report 2017

Dental Specialist Services in the Ministry of Health

Oral surgery	78
Orthodontics	70
Dental Public Health	87
Oral Medicine and Oral Pathology	14
Periodontology	42
Pediatric Dentistry	45
Restorative Dentistry	31
Forensic Dentistry	1
Special Needs Dentistry	5
Grand Total Number of Dental Specialists	**373**

Source: Ministry of Health, Malaysia, 30 Sept. 2018

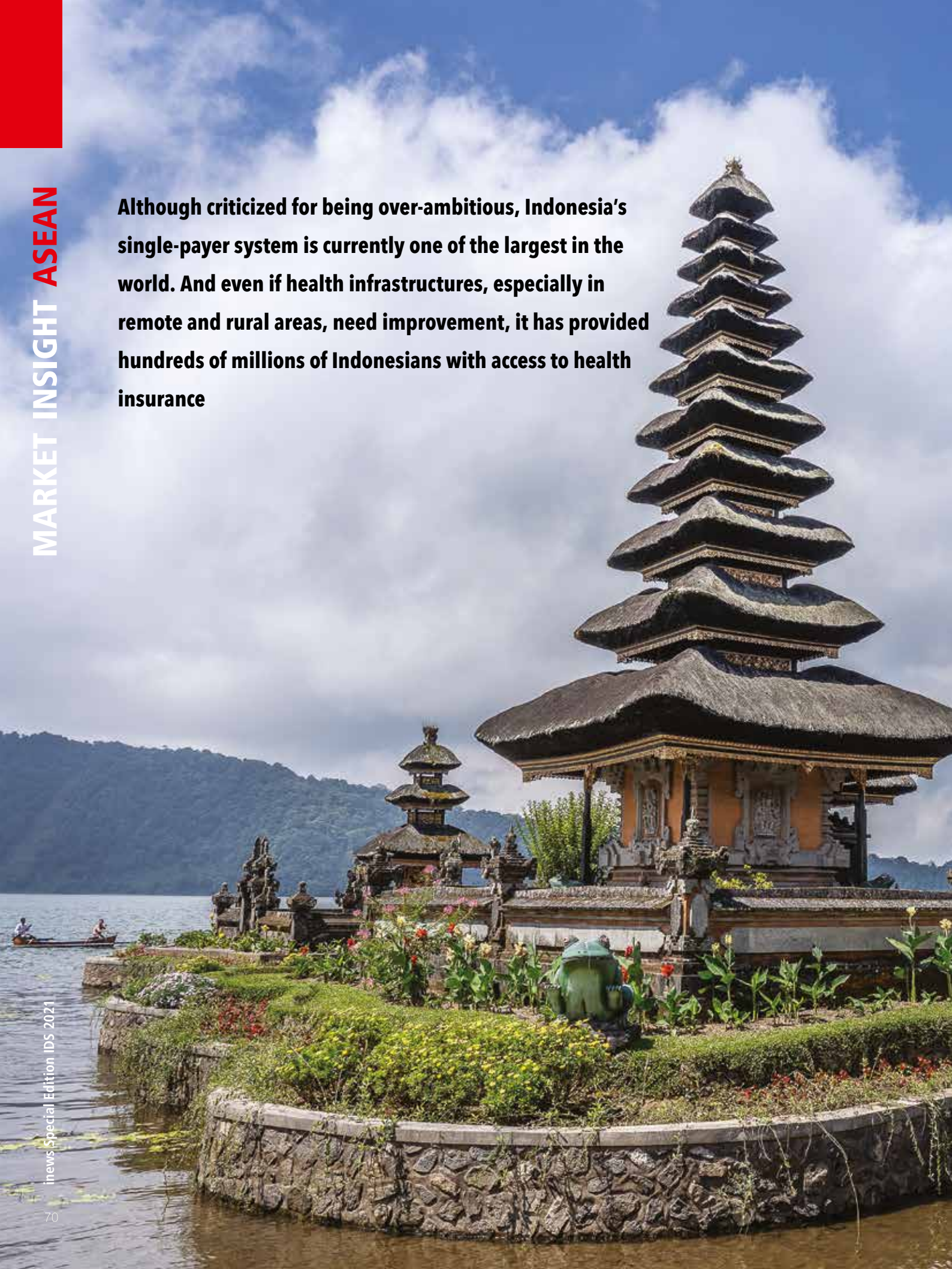
	Working in the Public	Working in the Private	Total	Professional to population ratio
Dental nurses*	2,679			1:3,105 (based on pop. under 18)
Dental technicians	772	704	1476	1:18,786
Dental surgery assistants	2970			1:9,336

** dental nurses, equivalent to Dental Therapists, provide public sector services for population under 18 years of age. The employment of dental nurses (therapists) is restricted to the public sector under the Dental Act 1971, where they mostly deliver oral health care to schoolchildren under the supervision of dentists. Source: Ministry of Health, 2009b*

	Year	Caries Prevalence (%)	Periodontal Disease Prevalence (%)
Pre-school Children (5-year-olds)	2005	76.2	N/A
	2015	71.3	N/A
School Children (12-Year-Olds)	1997	60.9	5.6
	2017	33.3	99.6
Adults (> 15-year-olds)	2000	90.3	90.2
	2010	88.9	94.0

Sources: National Oral Health Surveys, Ministry of Health Malaysia

Although criticized for being over-ambitious, Indonesia's single-payer system is currently one of the largest in the world. And even if health infrastructures, especially in remote and rural areas, need improvement, it has provided hundreds of millions of Indonesians with access to health insurance



REPUBLIC OF INDONESIA

COUNTRY INDONESIA

- Largest archipelago in the world with an estimated total of 17,504 islands.
- Strong economic growth and political stability is leading the country towards middle-income status, with increasing rate of national income per capita. Despite this, 6.8% of Indonesians are living below the poverty line.
- The median age in Indonesia is 27 years, third youngest in East Asia and around 10 years younger than in most major advanced countries.
- Indonesia remains the only country in Asia and one of 9 worldwide not to have signed the WHO Framework Convention on Tobacco Control.
- Large divide between the lifestyles and health services of rural and urban Indonesians, and the country is still sixth in the world for the worst distributed wealth among its population.
- Ministry of Health developed the oral health provision grand design for 2015–2030 with the goal of having a healthy Indonesia free of caries by 2030.
- Government share of total health expenditure remains low, at only 39%, whereas private, primarily out-of-pocket expenditure, is 60%.
- As a result of JKN, more local Indonesian companies began providing and manufacturing medical equipment shifting from heavy reliance on imported medical resources.

Population:
270.6 million

Political System:
Presidential representative democratic republic

Head of State and Head of Government:
President Joko Widodo

Capital:
Jakarta

Language(s):
Indonesian

Currency:
Rupiah

In Brief

After decades of authoritarian and centralized government, Indonesia introduced reforms in 1998 to establish stable democratic government, with devolution of authority to provincial and district levels of government. **To secure sufficient and sustainable health financing, the National Health Insurance scheme (*Jaminan Kesehatan Nasional* or JKN) was initiated in 2014 to improve health access of all citizens and progressive population coverage to reach universal coverage, with comprehensive benefit package for every citizen and minimal user fees or co-payments. The Indonesian health system has a mixture of public and private providers (those who opt to join the scheme) and financing.** However, government investment is limited, leading to insufficient health facilities and workforce needed for public services, encouraging the growth of private health facilities.

Indonesia has the lowest density of dentistry personnel compared to other countries and dental care is underprovided and underutilized, also due to low public awareness. Oral health service is included in the benefit package for basic oral care including counseling, curative treatment (teeth restoration and minor surgery) and dental emergency care. The private sector provides a substantial part of all dental care treatment. Public dental care is provided at *puskesmas* (community health centers) and hospitals, but services depend on the availability of dental health personnel and equipment. In 2018, 46.97% of *puskesma* did not have a dentist and the distribution is also heavily skewed towards urban areas. Additionally, unlicensed dental practitioners (*ahli gigi*) provide much of this care, and they are estimated to be 75,000, with currently no legal constraint to their practice.

Licensed dentists	22,237-35,000
Total dentists working in community health centers	15,833
Total public (community) health centers	9,831
Dentists working in the public sector	60.6%
Dentist working in the private sector	49.4%
Ratio dentist to population	1:17,105
Dental technicians working in public health center	1,214
Average no. of dental technicians per area (public health centers in each province)	0.13
Total no. of dental therapists	10,219
Dental therapists working in public health center	3,834
Average no. of dental therapists per area (public health centers in each province)	0.40

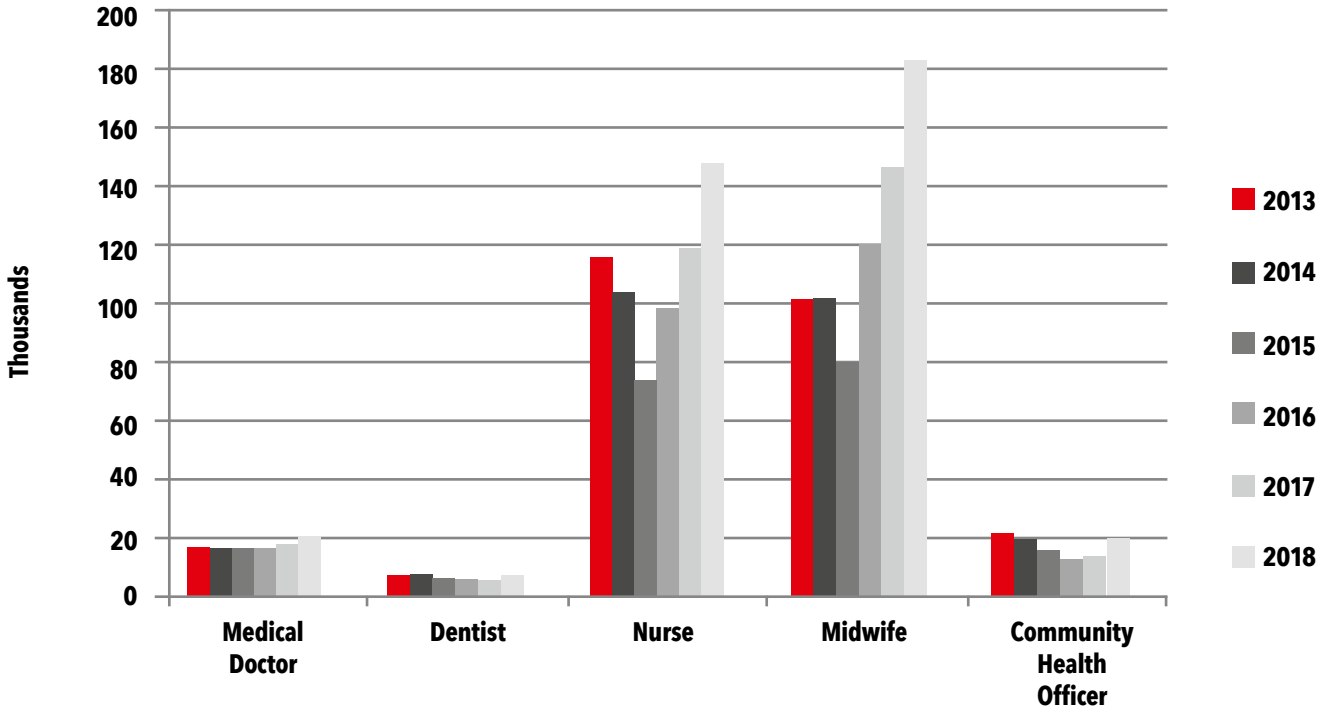
Source: Indonesian Health Profile, MoH database of government employees (www.bppsdmk.depkes.go.id/sdmk/) / www.frontiersin.org/articles/10.3389/fpubh.2019.00210/full / Indonesian Medical Council (KKI)

Dental School	31
School for dental technicians	10

Prevalence of dental caries	72.1%
Prevalence of periodontal disease	62.7%
EMD (Effective Medical Demand). Population receiving dental treatments when they have dental problems	8.1%
Unmet dental needs	68.9%

Source: Basic Health Research (Riskesdas), 2018

Number of Health Personnel in Community Health Centers (2013-2018)



Variables	2007	2013	2018
PERCENTAGE OF CHILDREN EXPERIENCING ORAL HEALTH PROBLEMS (PARENT'S PERCEPTION)			
Age < 1 years	1,1	1,1	NA
Age 1-4 years	6,9	10,4	NA
Age 3-4 years	NA	NA	41.1
Age 5	NA	NA	57.9
PERCENTAGE OF CHILDREN WHO CLAIMED TO HAVE RECEIVED DENTAL CARE (PARENT'S PERCEPTION)			
Age < 1 years	28,1	39.9	NA
Age 1-4 years	27.4	25.8	NA
Age 3-4 years	NA	NA	4.3
Age 5	NA	NA	9.5
PERCENTAGE OF CHILDREN WHO CLAIMED TO HAVE RECEIVED MEDICATION FOR DENTAL PROBLEMS (PARENT'S PERCEPTION)			
Age < 1 years	83,0	NA	NA
Age 1-4 years	93.0	NA	NA
Age 3-4 years	NA	NA	39.8
Age 5	NA	NA	48.9
PERCENTAGE OF CHILDREN WHO CLAIMED TO HAVE RECEIVED FILLING OR AN EXTRACTION (PARENT'S PERCEPTION)			
Age < 1 years	10.9	NA	NA
Age 1-4 years	9.7	NA	NA
Age 3-4 years	NA	NA	0.8
Age 5	NA	NA	2.0
PERCENTAGE OF RESIDENTS WHO CLAIMED TO HAVE BRUSHED THEIR TEETH PROPERLY (PARENT'S PERCEPTION)			
Age 3-4 years	NA	NA	1.1
AVERAGE SCORE OF DMFT			
Age 3-4 years	NA	NA	6.2
Age 5	NA	NA	8.1
PERCENTAGE OF CHILDREN WITH CARIES FREE			
Age 3-4 years	NA	NA	19.0
Age 5	NA	NA	9,9

NA, Not available
Source: Ministry of Health Republic Indonesia (7-9)

The quality of health in Cambodia is rising along with its growing economy. The public healthcare system has a high priority from the Cambodian government, and with international help and assistance, Cambodia has seen some major and continuous improvements in the health profile of its population since the 1980s.

THE KINGDOM OF CAMBODIA

COUNTRY CAMBODIA

- Cambodia is no longer a country emerging from conflict. The extended period of relative political stability in the wake of the 1998 election has provided a basis for significant and consistent economic growth.
- With strong garment production and tourism industries, Cambodia's average GDP growth rate is predicted to be around 7%.
- A young population, with a third of its citizens under the age of 15. However, falling fertility rates will limit population growth in the future and is expected to transition to an ageing population by 2050.
- Poverty rates decreased from 50% to under 20%, but the availability of quality healthcare remains low.
- Total healthcare expenditures account for approximately 6% of Cambodia's GDP and is increasing in the country's high-growth economy.
- The Cambodian population and healthcare system struggles with many of the diseases common to the Tropics, in particular in rural areas. In addition, malnutrition of children has long been a major problem.

Population:
16.49 million

Political System:
Constitutional monarchy with a unitary structure and a parliamentary form of government

Head of State:
His Majesty King Norodom Sihamoni

Head of Government:
Prime Minister Hun Sen

Capital:
Phnom Penh

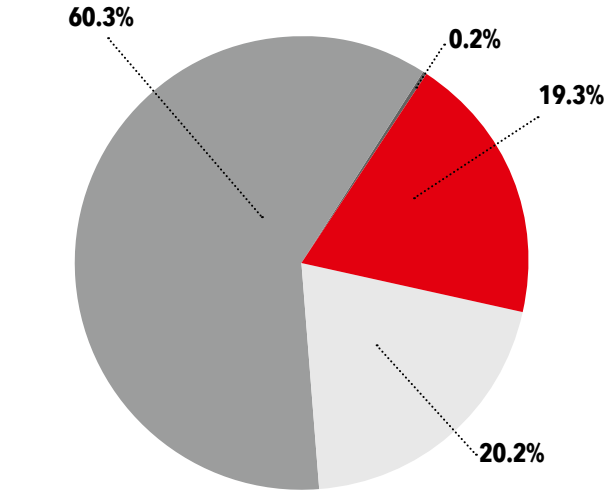
Language(s):
Khmer

Currency:
Riel

In Brief

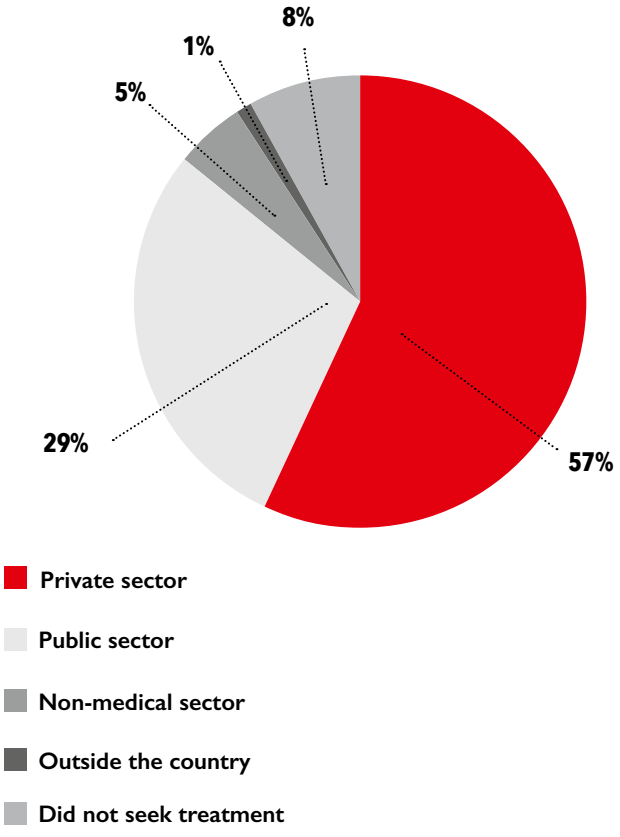
Starting in the 1990s, the Ministry of Health (MoH) worked with several international development agencies to reform the country's healthcare system. **Unlike most other developing countries, Cambodia has taken the first step on the path to expanding coverage not by providing social health insurance for civil servants and private-sector employees but with coverage of the poor, by implementing social health programs such as Health Equity Funds, voucher schemes, voluntary community-based health insurance, as well as private insurance.** Since then, the MoH is climbing steadily toward obtaining universal health coverage, but the stairs are long. Public healthcare, including basic oral care, is theoretically free for all citizens, but in fact there are many charges for services, and when supplies are unavailable in hospitals or clinics the patient must purchase them on the open market, resulting in high out-of-pocket spending by patients. One consequence has been the rapid growth of a disparate and loosely regulated but extensive sector of private healthcare providers. While the public sector is dominant in the promotion and prevention for essential reproductive, maternal, neonatal, child-care health and communicable diseases control, the private practitioners remain particularly frequented for curative care, inevitably leaving many people without access to affordable basic services, including dental care. Many dental nurses have recently been trained to provide dental care at community level, and several hundred medical nurses have also been trained to provide basic oral healthcare in rural areas. In the private sector, dental clinics are concentrated in Phnom Penh and other large towns.

Share of Total Health Expenditure by Funding Source



Source: National Health Accounts, Ministry of Health

Utilization of In- and Outpatient Services, By Sector



Source: CDHS 2010 (NIS, 2011); data reflect usage in the 30 days prior to the survey

Licensed Private Healthcare Institutions

Type of facility	Institutions licensed by Ministry of Health	Urban Location	Rural Location
Dental consultation cabinet*	368	na	na
Dental clinic	39	39 (100%)	0 (0%)

Note: "Cabinet" refers to private consultation rooms without inpatient capacity
Source: Bureau of Ethics, Hospital Services Department, Ministry of Health

	Total Number	Ratio per 10 000 pop.
Dentists	223 - 258	0.16
Dental assistant	65	0.05
School of dentistry	2 (Public)	4 (Private)

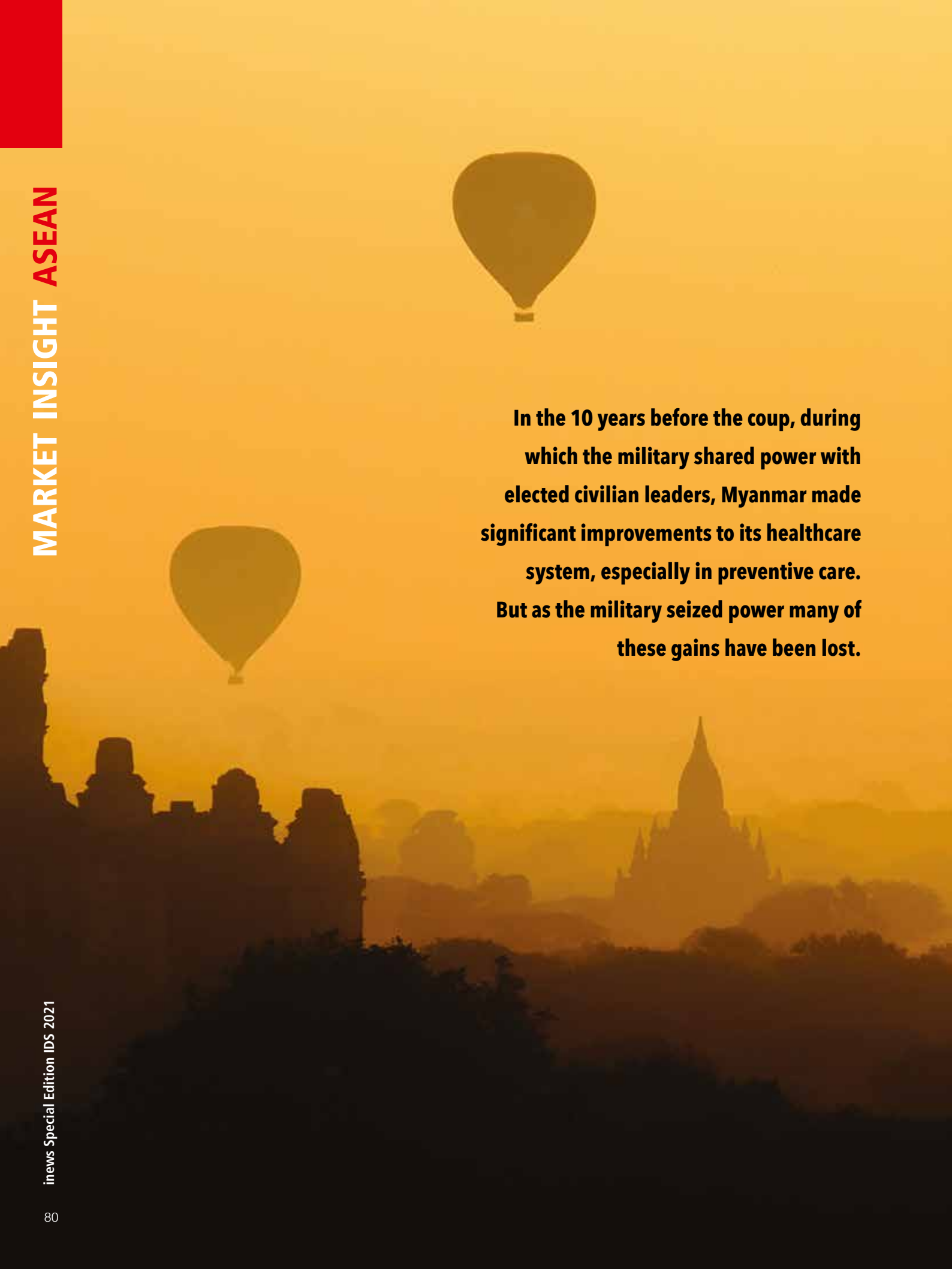
Source: MOH Health Workforce Projection Plan 2012–2020; Cambodia Health Staff Projection Tool, 2010, 2011. MOH Personnel Department.

National Oral Health Survey, 2011

Prevalence of dental caries in 6-year-olds	93.1%	9.0 mean DMFT
Prevalence of dental caries in 12-13-year-olds	80.1%	3.8 mean DMFT
Prevalence of dental caries in 35-44-year-olds	80.4%	5.6 mean DMFT

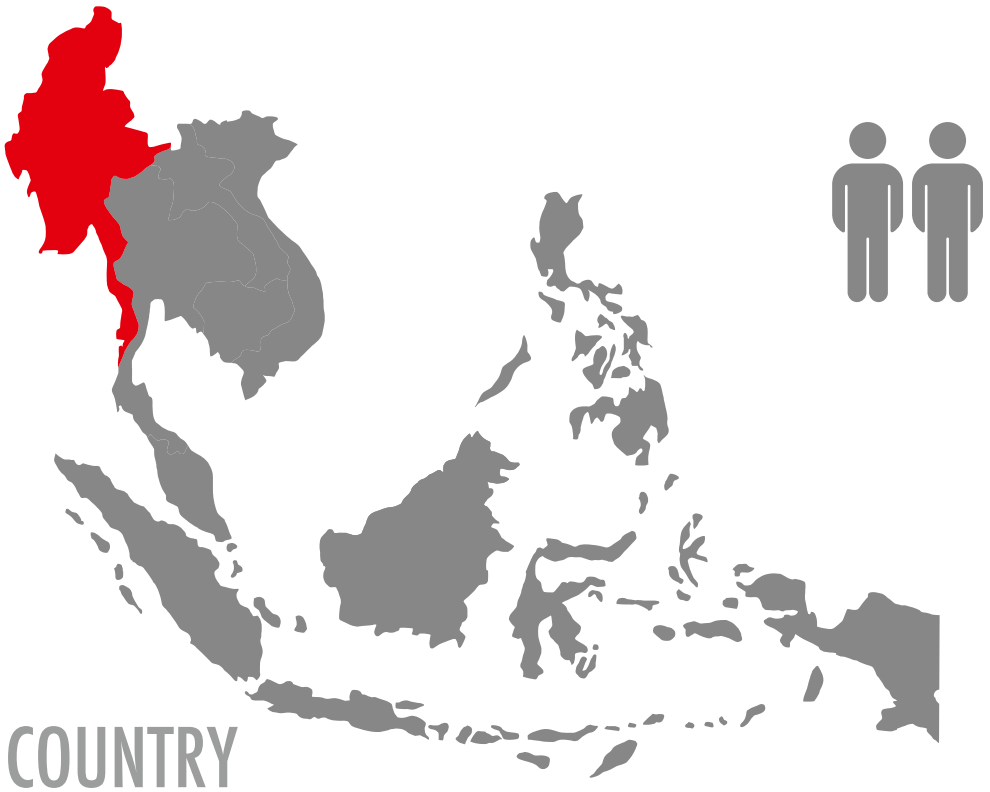
Oral Health Behaviors in 6-year-olds

Not brushing teeth	54.0%
Eat sweets every day	47.4%



In the 10 years before the coup, during which the military shared power with elected civilian leaders, Myanmar made significant improvements to its healthcare system, especially in preventive care. But as the military seized power many of these gains have been lost.

REPUBLIC OF THE UNION OF **MYANMAR**



COUNTRY

MYANMAR

- Nearly six months after the military seized power in Myanmar, people are struggling to access healthcare.
- Hospitals are closed or occupied by the military and many facilities are severely understaffed, while COVID-19 remains a threat.
- The economic fallout of the military takeover has also resulted in reduced or uncertain access to services, including healthcare and clean water.
- The average health expenditure per person in Myanmar reached just over 58 U.S. dollars in 2019. This was more than a four-fold increase from 2009, in which the health expenditure per capita was approximately 14 U.S. dollars.
- The latest Integrated Household Living Conditions Survey of Myanmar indicates that one in every four citizens of Myanmar is considered poor.
- Despite increases in funding, the country still falls behind other ASEAN nations in terms of its health expenditure and health outcomes.

Population:
54.05 million

Political System:
operates *de jure* as a unitary assembly-independent republic under its 2008 constitution. On 1 February 2021, Myanmar's military took over the government in a coup. Anti-coup protests are ongoing as of 24 February 2021.

Capital:
Nay Pyi Taw

Language(s):
Myanmar

Currency:
Kyat

In Brief

Myanmar, a country which has faced political and social instability, has been striving to improve all aspects of its economy and society and has attempted to make progress in reforming its healthcare system with varying results. **The health system comprises a pluralistic mix of public and private systems both in financing and provision and public healthcare accounts for around 80% of all hospitals and clinics. Nonetheless, high user fees for public services and considerable out-of-pocket payments in private care – which have traditionally accounted for around half of total health expenditure – pose considerable financial risk to demographic groups across the population.** Government is implementing three national health plans to lead the country towards the goal of universal healthcare by 2030, to grant the entire population access to a basic package of essential health services and lessen the financial burden on citizens. Even if the number of hospitals and doctors have increased, access to medical facilities and personnel can be particularly challenging in remote areas, given that these areas are home to around 70% of Myanmar's population. Yet another challenge resides with the drastic drop in the number of midwives, nurses, and dental surgeons. Dental health services are provided by both the public and private sectors, but dental surgeons are more in the private sector. Locally produced fluoride toothpastes are available everywhere at prices affordable to most people, including those in low socioeconomic strata. As Myanmar approaches months of military rule, in the aftermath of the military coup on 1 February , public health services remain severely disrupted, and the breakdown of its public healthcare system is taking a greater toll.

Regional Oral Health Survey (study group)

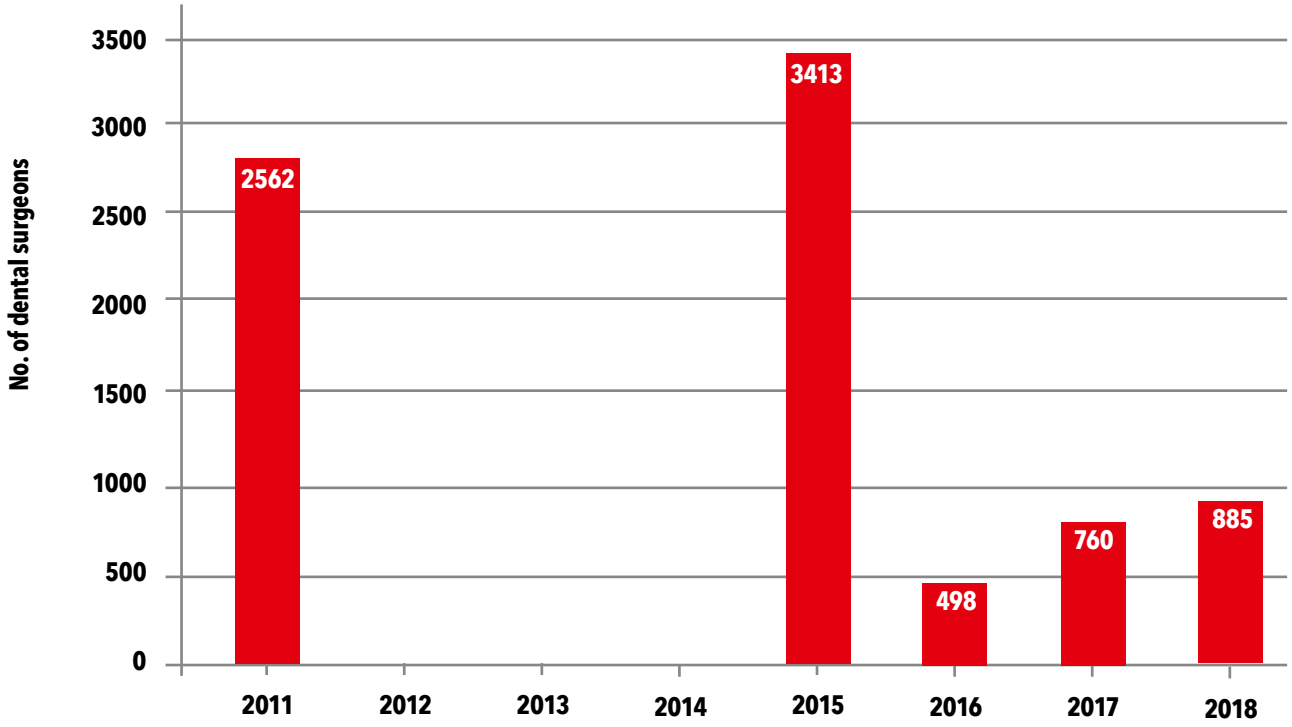
DMFT in 12-years-olds	0.8%
DMFT in 35–44-year-olds	2.94%
DMFT in 65–74-year-olds	6.94%
Bleeding and calculus scores in adolescents	>80%
Shallow periodontal pockets among 65-74-year-olds	20.4%
Deep periodontal pockets among 65-74-year-olds	10.4%

Note: Instead of a national-level oral health survey, regional oral health surveys are conducted annually in selected regions. Myanmar Dental Association in collaboration with Asia Oral Health Promotion Fund (Japan) conducted the Pathfinder Oral Health Survey during 2006–2007 in Yangon, Mandalay, Magwe, Taunggyi, Pa-an and Mawlamyaing townships to obtain oral health data representative of the delta, central, hilly regions, and coastal areas
DMFT= Decayed, missing or filled teeth

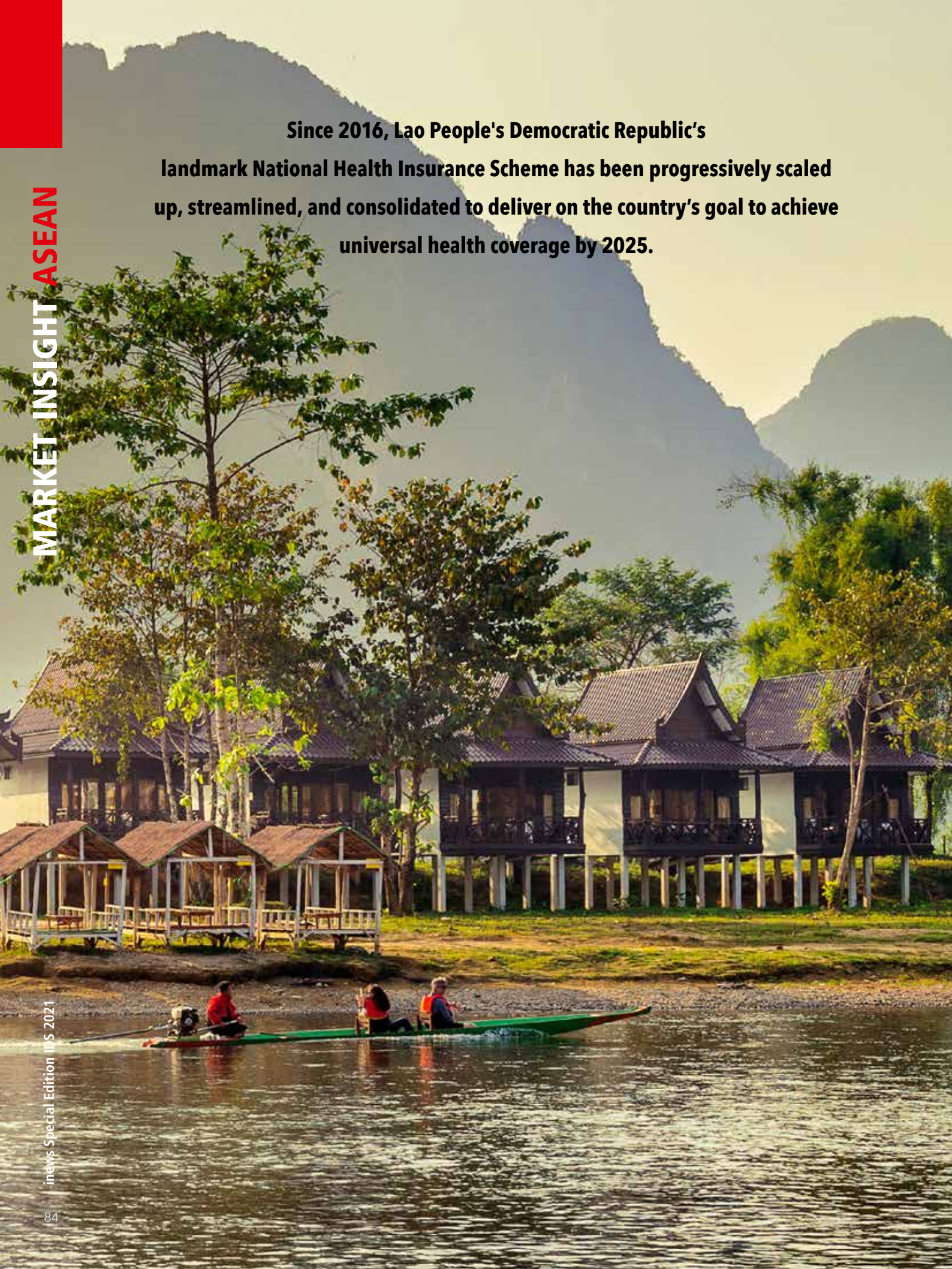
No. of dental tech. and assistants, 2010-2011	287
Ratio per 1000 population	0.01

Source: MOH (unpublished data, 2012).

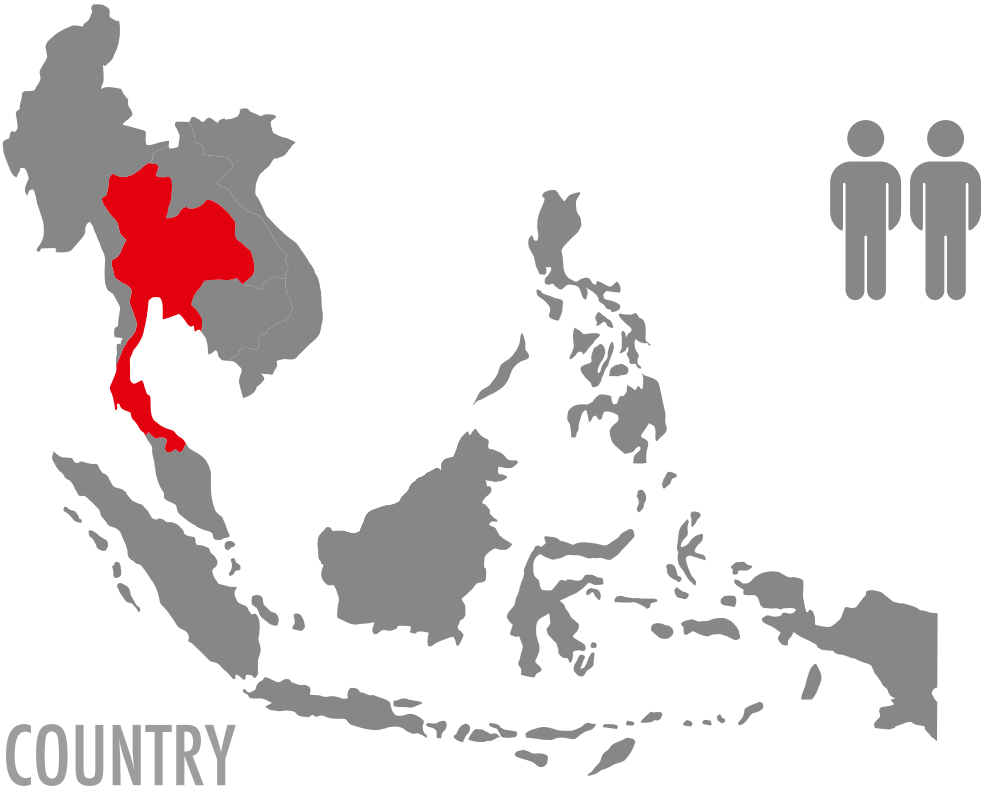
Number of Dental surgeons in Myanmar from 2011 to Sep. 2018



Since 2016, Lao People's Democratic Republic's landmark National Health Insurance Scheme has been progressively scaled up, streamlined, and consolidated to deliver on the country's goal to achieve universal health coverage by 2025.



LAO PEOPLE'S DEMOCRATIC REPUBLIC



COUNTRY

LAO

- Although a small country, Lao People's Democratic Republic has a fast-growing economy with average annual GDP growth of 7% over the past decade.

- Poised to become a major energy producer in Southeast Asia with its hydroelectric power projects. Additionally, the Laos-China railway will be completed by 2021, further accelerating Laos' economic growth.

- Although there have been significant improvements in the country, Laos still has a developing healthcare system. With weaknesses in financing, health records, infrastructure, and management of health services, medical care remains inadequate and unevenly distributed.

- Approximately 80% of the population live in rural communities and work in agriculture, and Laos is comprised of small villages clustered into various districts.

- Its total healthcare spending is predicted to rise as the economy grows. Thus, the country presents an opportunity to get involved early in the process to establish medical technology and networks that will be essential in the future.

- Composed of many minority ethnics, widely distributed throughout the nation. These characteristics sometimes influence various aspect of culture, languages, and sense of values towards health.

Population:
7.169 million

Political System:
One-Party socialist republic

Head of State:
President Bounnhang Vorachith

Political Government:
Prime Minister Thongloun Sisoulith

Capital:
Vientiane

Language(s):
Lao

Currency:
Kip

In Brief

As one of the poorest countries in South-East Asia, Laos has some of the lowest health indicators in the region and prevalent social protection gaps, leaving many households vulnerable to the impacts of ill health and accidents. This is exacerbated by widespread informality, which characterizes 80% of the workforce in the country. However, despite the scale of the challenge, Laos' social health protection landscape has undergone dramatic changes over the years. **In an attempt to address high out-of-pocket expenditure, that excluded many from access to treatment, the Government initiated various social health protection schemes, culminated into a unified tax-based National Health Insurance system, in line with the country's ambitious goal to achieve universal health coverage by 2025.** Thanks to increased Government subsidies in under 10 years, the percentage of the population covered by a social health protection scheme rose from 10.5% to 94.3%, with low co-payments and some exemptions. However, the healthcare provided at the local level often struggles from a lack of qualified staff, inadequate infrastructure, and need for an affordable device and drug supply. The small amount of data recorded show a large range in oral health problems among adult population and children due to a lack of appropriate strategies, clear priority, financial resources, effective preventive measures, and knowledge on oral health by the Lao people. Because of poor conditions of medical and dental institutions in rural and local areas, many people are still relying on traditional medicine, inevitably contributing as substitute to licensed dentists in areas where they are not available. A study on Lao school children reported high prevalence of untreated dental caries, with restorative level of dental care less than 0.7% for all age groups, with the majority of visits prompted by toothache.

No. of dentists, 2012	225
Dentistry personnel density (per 1000) pop., 2014	0.051
No. of Dental Schools	1

Source: WHO Health personnel

Pilot Pathfinder Survey on Children's Oral Health in Laos

	Caries prevalence	Mean DMFT	Total no. of decayed teeth (primary and permanent)
11–12-year-old age group	76.8%	1.44	2.84
5–7-year-old age group	93.6%	8.15	
8–10-year-old age group	92.7%	4.38	

January 2010, An oral examination, following WHO guide-lines, was performed on 289 school children aged 5–12 years in Vientiane, Laos
Source: http://www.stichtingbridgethegap.nl/website/wp-content/uploads/2015/06/Pilot-survey-on-dental-health-in-5%E2%80%9312-year-old-school.pdf

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XIMPLANT
Currents decontaminator in the treatment of infected peri-implant and periodontal sites

Doctor Paolo Calvani* and Doctor Cesare Paoleschi**
** Freelance in Florence, ** Dentist, freelance, founder of IRIS Dentistry Company*

This article presents a new decontaminating method through the application of currents for the decontamination of infected peri-implant and periodontal sites.
The method is called the XIMPLANT system.
The current treatment technique provides precise protocols, in terms of timing and intensity of automated currents, for each type of application, such as to carry out a non-invasive and non-traumatic treatment for healthy tissues. The concept of the treatment is based on the physical action of destruction of the bacterial biofilm. The "electrode" effect of the system is exploited, thus developing a current around its surface which decontaminates it. These treatments are performed "closed" without local anesthesia.
The XIMPLANT system involves contact with the active electrode on the implant, which is "crossed" by a high frequency electromagnetic wave that breaks the biofilm acting on the entire surface of the implant. In fact, it should be remembered that titanium has an ionic conductivity subjected to a potential difference of 3%, sufficient to induce the ionic movement on its surface, such as to induce the destruction of the bacterial biofilm.
Peri-implantitis represents a pathology that poses serious survival problems for a high percentage of prosthetic rehabilitations on implants.
The bacterial flora forms a biofilm that undermines osseointegration by inducing a resorption of the peri-implant bone which, in the long run, leads to the loss of implant anchorage, as in periodontitis occurs for a natural element.
The bacterial flora in question is the same responsible for periodontal problems.
The formation of the biofilm begins with the adhesion of microorganisms to a surface.
When a certain amount of bacteria accumulates on a surface and reaches a certain cell density, it begins to secrete a substance which is basically a polymer made up of polysaccharides, proteins and DNA. This substance mixes with the water present in the environment and gives rise to a matrix where bacterial cells are strongly rooted in the form of biofilms. Peri-implant mucositis occurs in about 80% of subjects and in 50% of implants. Peri-implantitis occurs in 28% and in a percentage greater than or equal to 56% of the subjects (Zitzmann, Berglund T. - J Clin Periodontol 2008 Sep, 35 (8 Suppl) 286-91). Currently, the therapeutic treatments of peri-implantitis involve mechanical maneuvers associated or not with topical and / or general pharmacological treatments, such as antibiotic therapy. Prevention actions are essentially based on home and professional hygienic maneuvers, in order to prevent irritative spines from which bacterial colonization can start, first of the gingival sulcus, creating a mucositis, then of the peri-implantation creating frank peri-implantitis. In the initial stage of mucositis, bone resorption is usually of little entity, but the bacterial biofilm already extends to affect the deep implant surface, that is, a contaminated area that is not evident in this phase with instrumental examinations.

Peri-implantitis represents a pathology that poses serious survival problems for a high percentage of prosthetic rehabilitations on implants.

It is precisely at this stage that it is interesting to have a device available that allows the "breaking" of the bacterial biolfilm along the entire surface of the implant, even the one where bacterial colonization has not yet caused pathology (not visible.)
In fact, even managing to remove the biofilm in the exposed parts of the implant, one does not act on those bacteria that colonize the perimplant in the areas where it is still anchored to the bone, but since the surface of the implant is an easily etched surface, it allows maturation and bacterial aggregation. Also, even in the face of "frank" peri-implantitis with bone resorption and suppurative state, an instrument that allows the deep decontamination of the implant and of the deep peri-implant areas

would be particularly effective from the point of view of survival of the implants themselves. Until now, this profound preventive-therapeutic action was not feasible.

Treatment methodology

Once the infection and the stage of mucositis and / or frank peri-implantitis (probing depth, plaque index, bleeding index) have been diagnosed, professional hygienic treatment is carried out. At the end of the peri-implant toilet, the active electrode is applied to the implant collar. The ground electrode is held in the patient's hand. The XIMPLANT decontaminator is set on the peri-implantitis program and the currents are applied, according to pre-set times and methods. The treatment is painless. The patient is then invited to adopt an adequate home hygiene attitude. The bactericidal action of the current is reported by numerous studies in the literature. Particularly significant are the works of Del PozoJ, L, M.S. Rouse, (1) where there is an effective action of the electric current against the biofilm in culture, consisting of Pseudomonas aeruginosa, staphylococcus aureus and Staphylococcus epidermidis. Sy et all.

Other particularly significant works are those of Dreesa (2) on electrochemical inhibition of 2003, and of LEE, Sy et all (3) of 2012.

A recent work, currently being published, by Prof. Giammarco Raponi and Dr. Lisa Valentini, of the Department of Public Health and Infectious Diseases of the Sapienza University, highlighted the effectiveness of the XIMPLANT system: "In the experimental procedures, a strong bacterial biofilm produced by Enterococcus faecalis from ATCC collection has been layered on the implants that were successively treated in a treatment chamber by electric current produced by the X-IMPLANT machine. Evidences are provided that the electric treatment granted by the X-IMPLANT system completely removed the bacterial biofilm".

Particularly interesting in this method is the prevention of peri-implant infections.

The "prevention" protocol provides at the end of a normal scaling session the preventive application on the implant collar in the subgingival prosthesis-implant passage area of the active electrode. For "Toronto" rehabilitations, the application takes place directly through contact with the passing structure.

References

· David Freebairn, David Linton, Eileen Harkin-Jones, David S Jones, Brendan F Gilmore and Sean P Gorman: "Electrical methods of controlling bacterial adhesion and biofilm on device surfaces". Expert Rev. Med. Devices 10(1), 00–00 (2013)

· Mah TF, O'Toole GA. Mechanisms of biofilm resistance to antimicrobial agents. Trends Microbiol. 9(1), 34–39 (2001).

· Del Pozo JL, Rouse MS, Patel R. Bioelectric effect and bacterial biofilms. A systematic review. Int. J. Artif. Organs 31(1), 786–795 (2008). •• Excellent, comprehensive review of bioelectric effect-related literature.

· Archibald LK, Gaynes RP. Hospital_acquired infections in the United States. The importance of interhospital compari_sons. Infect. Dis. Clin. North Am. 11(2), 245–255 (1997).

· Nicolle LE. Uncomplicated urinary tract infection in adults including uncompli_cated pyelonephritis. Urol. Clin. North Am. 35(1), 1–12 (2008).

· Nielsen PH. Biofilm dynamics and kinetics during high-rate sulfate reduction under anaerobic conditions. Appl. Environ. Microbiol. 53(1), 27–32 (1987).

· Hall-Stoodley L, Costerton JW, Stoodley P. Bacterial biofilms: from the natural environment to infectious diseases. Nat. Rev. Microbiol. 2(2), 95–108 (2004).

· Costerton JW. Overview of microbial biofilms. J. Ind. Microbiol. 15(3), 137–140 (1995).

· Douglas LJ. Medical importance of biofilms in Candida infections. Rev. Iberoam. Micol. 19(3), 139–143 (2002).

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From Dubai to Cologne: Innovation Drives exocad's Growth

AEEDC, Dubai. 30th June 2021 - Infodent International meets Christine McClymont and Novica Savic, respectively, Global Head of Marketing and Communications and CCO of exocad GmbH, an Align Technology, Inc. company, and one of the leading dental CAD software providers worldwide, on the latest Galway software releases and new branding at IDS 2021.

What innovation is exocad bringing at AEEDC and the MEA region?

N. What we are showcasing here, and in the region, are our latest software releases: DentalCAD 3.0 Galway, launched a couple of months ago, as well as exoplan 3.0 Galway for guided surgery. Also, we are presenting our new PartialCAD release, launched in June 2021. We have demonstrations here for our resellers and customers. exocad users from the MEA region can connect with our software expert Michael Kohnen, Head of Global Application Support at exocad. This way, we can get constructive feedback from them on the new software releases.

How significant is the MEA region and AEEDC for exocad?

C. The MEA region is of great importance to us. It is essential to show our commitment to this region and to support our resellers here. We are extremely excited to be at AEEDC to meet with customers as well as resellers, to get their feedback, learn how our new products are being received and to be able to catch-up with our industry friends in person again.

What about future perspectives for this area? Are you positive?

N. Yes, we definitely are. In this area, and in the Middle East in general, we are one of the market leaders in CAD software. We know this from the feedback we get from our resellers, as well as from our users. According to them, most labs are using our software. As you may know, our products are not only available under the exocad brand, but under many different brands, and our global partners, who are also highly active here, are helping us to become a leading CAD software solution provider in the Middle East. It is a growing region, moving rapidly into the digital world.

What did you expect from this trade show before coming here and what are the outcomes so far on this second day?

Christine McClymont and Novica Savic

C. We didn't really know what to expect, to be completely honest. We were very pleased that attendance was good already on the first day. People were coming up to our booth asking a lot of questions about the new product releases. We experience that many people are eager to go back outside again and to meet in person. It was definitely the right decision to come here.

N. What you hear, not only from resellers but from the people here, is that we are finally restarting, moving again, seeing each other. This networking is extremely important. We have all used Teams, Zoom, and the like, but they cannot replace in-person interactions. You can really feel that here. This is great!

What else can you tell us about the new software releases?

N. An interesting detail is that all our software releases are named after European Capitals of Culture. For 2021, we have chosen the Irish city of Galway. So, all our new releases are named Galway, as you can see from our three core products showcased here: DentalCAD, exoplan as well as ChairsideCAD 3.0, which is going to be shown at IDS in September. We are still in the launch phase of this year's Galway releases, as their coverage depends greatly on software registration processes in different areas.

What can you tell us about exocad at IDS in Cologne this September? Do you have news or expectations?

C. IDS is one of the most important events on our calendar. Again, it was never a question of whether we would participate or not. We knew we would attend but we also wanted to provide a safe environment for those visiting our booth. This year, we increased our booth size by 50% to create our biggest booth ever at IDS. We will have multiple live demo stations where customers can experience the software and meet our teams in person. Our ambition is to make it a unique experience for everyone. Visitors will not only be able to try the software and ask questions, but they can also discover our new branding – as we will present a new booth design. We are excited about this. We can't wait for IDS!

N. We all know that IDS is by far the largest dental trade event worldwide and an innovation driver for most companies. Being the biggest event in the dental industry motivates many companies, historically, to launch their latest products at IDS, and the first question that people always ask is "What's new?". This is precisely why we go to exhibitions: for networking, but also to discover the latest innovations.

It is very encouraging from your side. It is astonishing that you are going to have the biggest booth ever.

N. Yes, exocad will have by far its largest booth ever and same for our parent company, Align Technology. As a group, we are going to be the largest exhibitor at IDS, an illustration of how we are together helping customers understand the significant benefits of digital dentistry.

Thank you for your time.

See exocad at IDS booth A-020, in hall 3.2

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MUST SEE IN COLOGNE. AT IDS!

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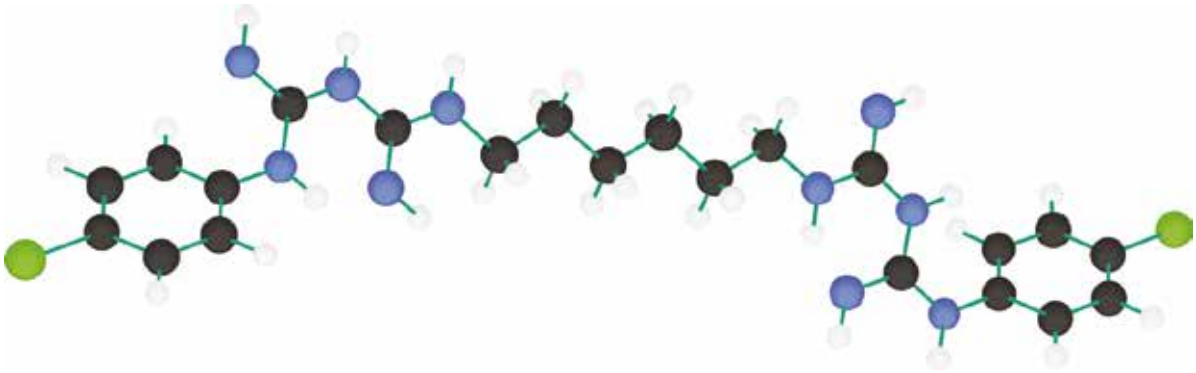
HOT TOPIC

Chlorhexidine: A Weapon Against Microbes for Almost Seventy Years

Author: Luca Maria Pipitone
Degree in Biotechnology
luca.pipitone@infodent.com

Molecules such as chlorhexidine are undoubtedly important resources, capable of excellent antibacterial and anti-plaque properties but at the same time their use must be limited in time and cannot be an everyday solution for oral hygiene.



Man has always had a close relationship with microorganisms, a symbiotic relationship that offers advantages to both and that has shaped, during the course of evolution, structures and mechanisms that have allowed this coexistence. A mutualism that guarantees microbes with a constant source of sustenance, reciprocally, they provide great metabolic capacities, anabolic and catabolic pathways that we do not possess, such as those for plant polysaccharides degradation or for vitamin K biosynthesis. From the intestinal microbiota up to the oral one, our biochemical balance is structurally dependent on them, to the point that today modern medicine no longer sees them as stable hosts but as an added organ.

Given its wide use, numerous scientific studies have been conducted with it as main actor.

Staying healthy means, among other things, favoring the balance that exists among the thousands of microbial species living in our body, a balance that, if strong, hinders the proliferation of pathogenic microorganisms through a mechanism of competition.

However, such ideal conditions are not always present and, either by fault or by bad luck, we run into disorders due to the presence of opportunistic organisms. In these cases, widely used molecules are antimicrobials and antibiotics, which act by killing microbial life forms, or in any case by limiting their proliferation. **Two are the main problems associated with these therapies: the formation of drug-resistant microbial strains and the concomitant elimination of symbiotic species that contribute to our well-being. While the second problem could be overcome with nutrition and probiotics intake, the first is more complicated to deal with. Microbes are very tenacious organisms and have a great ability to adapt, which**

leads them to develop resistance to microbicidal molecules over time.
Companies operating in the pharmaceutical sector invest a lot on research and development, by constantly introducing new molecules into the market, capable of dealing with pathogens that have now become resistant. This is a vicious circle, and it is only a matter of time before a microbial strain becomes insensitive to therapy again.
Clearly not all microorganisms are the same as well as not all molecules act in the same way. Some of these aim at specific targets such as an enzyme, or a cell wall constituent, while others aim at a class of macromolecules or even a particular cell structure.

Today, by studying this resilience phenomenon in depth, it has become clear that the molecules acting on the physical structures of the cell tend to be more complex for a microorganism to deal with and therefore lead to a rarer phenomenon of resistance. An example of a widely used molecule that falls into this class is: chlorhexidine. It is a synthetic disinfectant, poorly soluble in water, mainly marketed in the form of gluconate salt. Introduced to the market in the 1950s and, since then, widely used both in the medical field and for general disinfection operations.

Given its wide use, numerous scientific studies have been conducted with it as main actor.

At molecular level, it expresses its microbicidal function by altering the structure of the cell membrane of bacteria and fungi, leading to the collapse of cytoplasmic proteins. In medicine, chlorhexidine is used in many fields, from dermatology to gynecology, through to dentistry, in mouthwash solutions in concentrations between 0.12-0.2%. Used in combination with toothbrush and dental floss, it counteracts the onset of gingivitis and plaques and, more generally, promotes disinfection following any oral lesion, whether accidental or from surgery. This is due to its broad spectrum of action which gives it efficacy against fungi and bacteria, as well as the great advantage of rarely leading to the development of resistant strains. All these qualities have made chlorhexidine a widely commercialized disinfectant, as well as one of the most effective anti-plaque agents on the market.

Given its wide use, numerous scientific studies have been conducted with it as main actor. A 2017 analysis of 51 papers underlines that the use of chlorhexidine-based mouthwashes (0.1-0.2%), if coupled with adequate brushing and flossing, prove effective in fighting moderate intensity gingivitis and dental plaques. On the other hand, in 43% of the studies evaluated, side effects associated with long-term therapies were presented.

Among the cited side effects: dental pigmentation, increased stones, altered taste, and allergic reactions. In some clinical studies, ulcers, gingivitis, trauma, erythema,

desquamation, and keratinization have been reported, although these side effects occurred less than 1% in frequency. Almost all drugs have side effects, it is physiological and does not necessarily indicate the inadequacy of a therapy. On the contrary, it is necessary to consider the frequency with which they are found, the impact they may have on the patient's health and the influence they exert on the choice to whether or not to take the drug.

In the case of chlorhexidine, the formation of stains on teeth, associated with prolonged use, represents the greatest problem. A problem that would discourage many from using it as mouthwash and that made it necessary for the manufacturer to revise the formula. Sodium metabisulphite and ascorbic acid have been added to the original formula which, through their antioxidant action, block this pigmentation phenomenon. Basically, considering the improvement made to the drug, the prolonged use of these new mouthwashes involves an alteration in taste as main side effect, in addition to all those effects occurring in less than 1% of the cases.

In a context in which the use of the disinfectant is limited in time, this means that the contraindications are all in all acceptable. Although this may seem satisfactory, today synthetic compounds do not enjoy an excellent reputation and people are increasingly trying to rely on natural remedies, which are conquering the market more and more consistently. Among these, phyto-extracts, i.e., extracts of plant origin, offer a wide range of active ingredients, among which clearly appear various antibacterial and anti-inflammatories, which could be proposed as alternatives to chlorhexidine.

Although chlorhexidine hardly leads to the development of resistance by microorganisms, bacterial strains that are insensitive to the molecule are well known.

A 2018 work, conducted by Madal and collaborators, compared the effectiveness of mouthwashes based on this molecule with that of Citrus sinesis extracts, that is the common orange tree. In this study, antibacterial, anti-inflammatory, anti-plaque properties and their relative efficacy in the context of short-term therapy were evaluated.

To achieve this, 2 groups were selected, consisting of 10 subjects each, suffering from gingivitis and they were asked to perform 2 rinses a day for 2 weeks: one group with 2% chlorhexidine and the other with a 4% citrus alcoholic extract. The results show that chlorhexidine shows greater antibacterial and anti-plaque properties than the phyto-extract which, on the other hand, has better anti-inflammatory abilities, probably attributable to the high content of phenolic molecules and vitamin C.

Although data give each of the two solutions different capacities, quantitatively the differences are slight and consequently, from a clinical point of view, the effectiveness of mouthwashes can be considered equivalent.

A similar study conducted in 2015 analyzed, comparing three solutions, the antibacterial properties of: honey, 2% chlorhexidine gluconate

and a mouthwash combination containing 2% chlorhexidine and xylitol.
Thanks to the joint action of hydrogen peroxide (produced via enzymes), phenols and high osmotic pressure, honey exerts a sufficiently consistent antibacterial action to be more effective than chlorhexidine gluconate, which instead sees its limit in bacteria naturally resistant to this molecule, such as some streptococci.

However, these bacteria, often associated with the development of caries, are sensitive to xylitol and in fact the synergistic use of this molecule with chlorhexidine greatly increases the antibacterial capacity, exceeding, even if not significantly, the effectiveness of honey. **Although chlorhexidine hardly leads to the development of resistance by microorganisms, bacterial strains that are insensitive to the molecule are well known.**
In fact, a 2002 study highlighted that among some bacterial colonies, isolated from soap dispensers containing 2% chlorhexidine, two strains proved to be totally insensitive: Pseudomonas aeruginosa and Acinetobacter baumannii. Molecules such as chlorhexidine are undoubtedly important resources, capable of excellent antibacterial and anti-plaque properties but at the same time their use must be limited in time and cannot represent a daily solution for oral hygiene. This can be clearly understood from the fact that many of the side effects occur in cases of prolonged use, and also, the possibility that bacteria resistant to the molecule will spread is tangible and becomes all the more real the more this microbicide contributes to the daily disinfection of the population.

Bibliography

[1] Dr. Aritra Mandal, Dr. Balaji Manohar, Dr. Neema Shetty, Dr. Aditi Mathur, Dr. Barkha Makhijani, Dr. Nandini Sen, "A Comparative Evaluation of Anti-Inflammatory and Antiplaque Efficacy of Citrus Sinesis Mouthwash and Chlorhexidine Mouthwash," Journal of Nepalese Society of Periodontology and Oral Implantology, Vol. 2, No. 1, Jan-Jun, (2018).

[2] Derek Richards, "Chlorhexidine mouthwash plaque levels and gingival health," Evidence-Based Dentistry 18, 37-38, doi: 10.1038/sj.ebd.6401232 (2017).

[3] Ankita Jain, Dara John Bhaskar, Devanand Gupta, Chandan Agali, Vipul Gupta, Rajendra Kumar Gupta, Priyanka Yadav, Akash B. Lavate, Mudita Chaturvedi, "Comparative evaluation of honey, chlorhexidine gluconate (0.2%) and combination of xylitol and chlorhexidine mouthwash (0.2%) on the clinical level of dental plaque: A 30 days randomized control trial," Perspectives in Clinical Research, January-March, | Vol 6, Issue 1, (2015).

[4] SC Supranoto, DE Slot, M Addy, GA Van der Weijden, "The effect of chlorhexidine denti- frice or gel versus chlorhexidine mouthwash on plaque, gingivitis, bleeding and tooth discoloration: a systematic review," Int J Dent Hygiene 13, 83-92, (2015).

[5] Steven E. Brooks, Mary A. Walczak, Rizwanullah Hameed, Patrick Coonan, "Chlorhexidine Resistance in Antibiotic-Resistant Bacteria Isolated from the Surfaces of Dispensers of Soap Containing Chlorhexidine," Infection Control and Hospital Epidemiology, Vol. 23, No. 11, 692-695, (2002).

[6] Thicumporn Kuyyakanond and Louis B. Quesnel, "The mechanism of action of chlorhexidine," FEMS Microbiology Letters 100, 211-216, (1992).

[7] "Chlorhexidine Official FDA information, side effects and uses," Drugs.com, Medline Industries Inc., (2016).

Gingival recession treatment with Concentrated Growth Factors (CGF) in the esthetic zone

A CASE REPORT

Dott. Luca Mangani
Oral surgery specialist, Phd in "Materials for health, environment and energy"

Female patient, 30 years old, no smoking habits, no systemic disease. 5 years ago was placed an implant, zone 2.1, after a car accident. Unfortunately the implant developed a soft tissue loss during the following 3 months healing process and her esthetic defect was masked with the final prosthetic crown. Patient desires were to smile once again and not to suffer anymore. It was planned to perform a coronally advanced flap technique without taking connective tissue graft from the palatal side but using only CGF membranes, = 8 totally painless. Looking at

Fig. 1 Patient smile profile

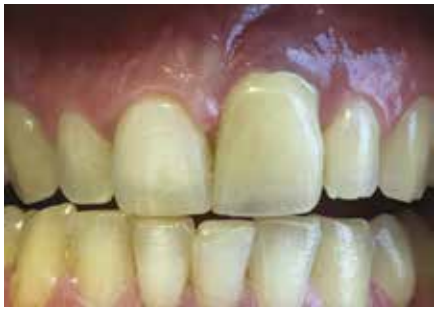


Fig. 2 Patient frontal smile

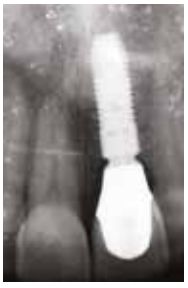


Fig. 3 Pre operative X-Ray

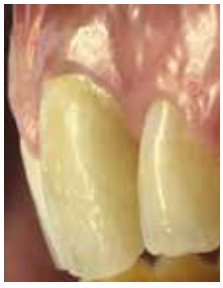


Fig. 4 Pre operative soft tissue defect analysis

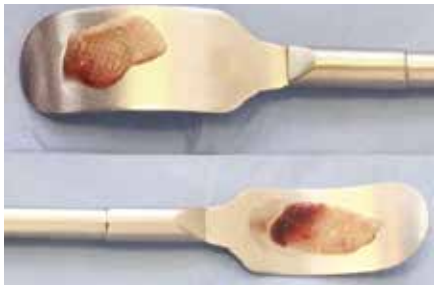


Fig. 5 CGF Membranes

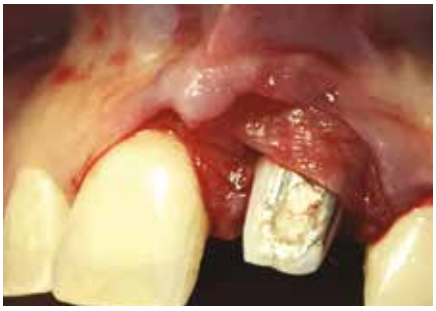


Fig. 6 Flap design and CGF membranes filling

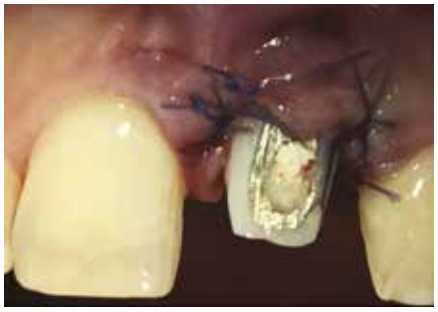


Fig. 7 Vicryl resorbable suture

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- Teaching assistantship in "Periodontology" at University of Rome "Tor Vergata".
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- Private practitioner in Rome.

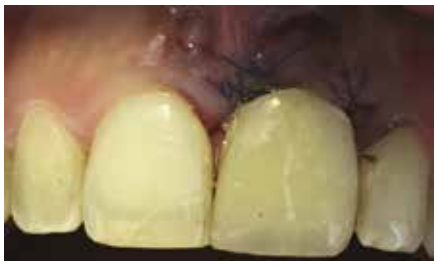

Fig. 8 Immediate provisional crown

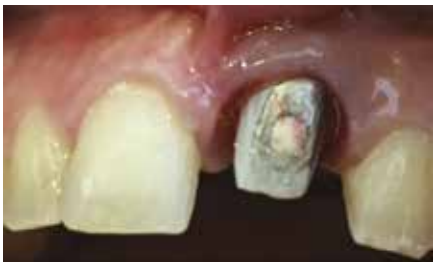

Fig. 9 3 Months post-operative soft tissue appearance

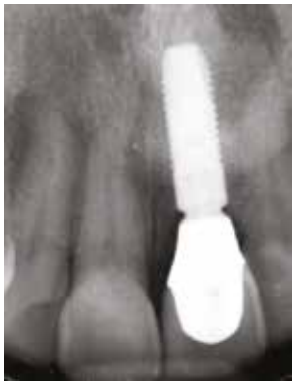

Fig. 10 3 months post-operative X-ray

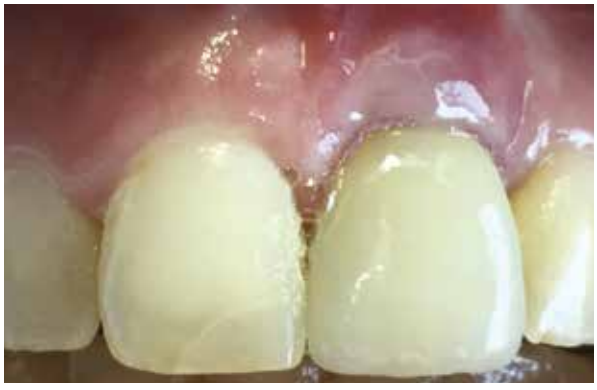

Fig. 11 FInal crown restoration

final very good result, despite Concentrated Growth Factors (CGF) did not improve clinical outcomes when compared with Connective Tissue Graft (CTG), surely this method had a more positive effect on postoperative pain.

It was planned to perform a coronally advanced flap technique without taking connective tissue graft from the palatal side but using only CGF membranes, totally painless.

Causal treatment management during mucogingival surgery procedures: application of ozone therapy at home and by professionals

TBM and DOHMA (Digital Oral Hygiene Motivation Approach)

Gianna Maria Nardi

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To effectively manage the patients' oral hygiene care is essential for the patients themselves and for professionals in complex clinical cases. Therapies may fail in case a patient undergoes intricated rehabilitative therapies without being previously informed and motivated towards committing to an oral hygiene regime and consistent medical follow-ups (Garmyn et al. 1998; Westfelt et al. 1985). For the therapy to be successful, it is necessary to implement an approach that involves tailored, personalised and shared protocols (Nardi et al. 2020) discussed and agreed upon by the patient. In the few instances where the mechanical control of the bacterial biofilm is insufficient, it is necessary to correctly manage the chemical control by the professionals and at home through the use of mouthwashes and gels that contain specific ingredients (Lang et al. 2008). Combining periodontal therapy with the application of ozone therapy at home and by professionals leads to the successful maintenance of healthy gingival tissues.

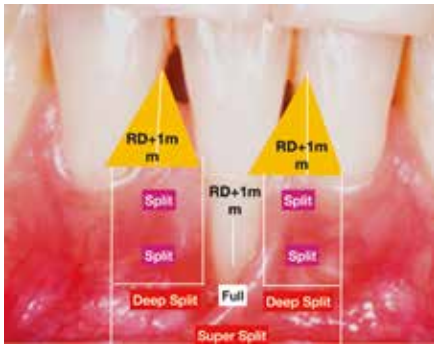
CASE REPORT

The patient selected for the study is a 25-year-old non-smoker healthy woman with a Zucchell's class III gingival recession of 12 mm (Zucchelli, 2011). The patient received orthodontic treatment (Verrusio et al. 2018) and was later subjected to a gum recession surgery. The condition has intensified after the patient was subjected to a frenectomy procedure using diode lasers (SICOI, 2011) which did not improve the aesthetic aspect and caused a scarring in the deeper tissues, thus worsening the clinical condition. A further issue consists of the thin tissue biotype (Cortellini et al. 2018) and a scarce gingival papilla in the teeth #41-#31 zone. fig. 1 (Zucchelli et al. 2006).

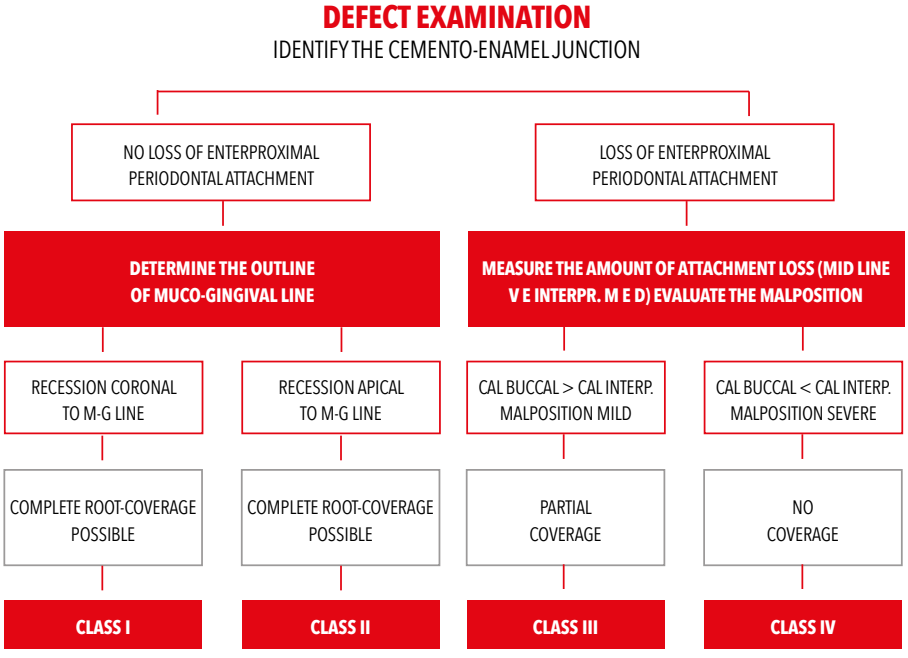
Baseline

MATERIALS AND METHOD

After a thorough assessment, the dental team designed a diagnostic- therapeutic approach that involves an integrated treatment strategy where the patient actively participates to the oral hygiene therapy at home. The general risk factors were evaluated (Van Dyke et al. 2005),

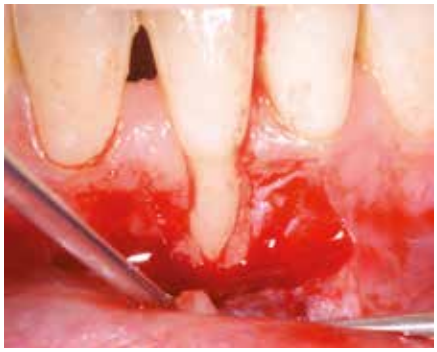


Mucogingival surgery steps

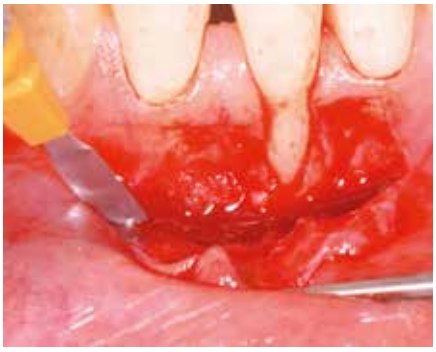


Zucchelli Classification

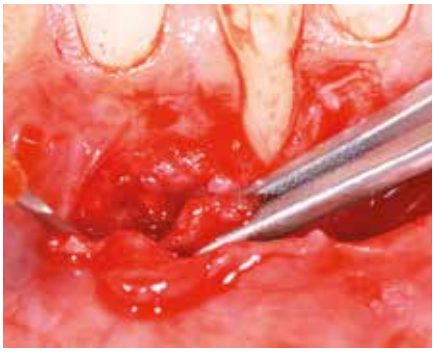
SURGERY PHASES



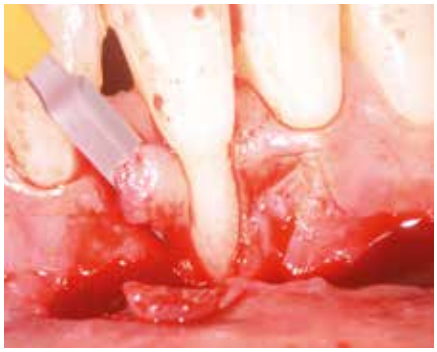
Sharp dissection to prepare a full-thickness tunnel



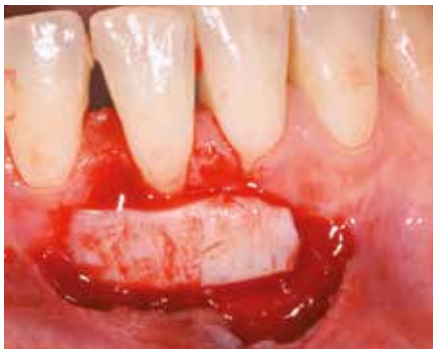
Deep incision to achieve a split-thickness envelope flap



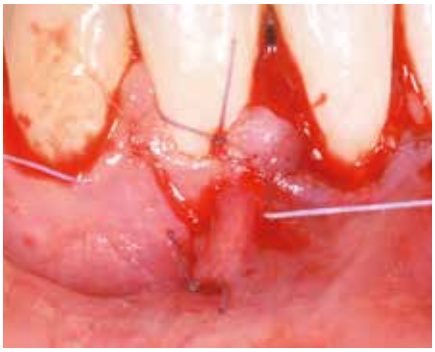
Superficial incision to achieve a split-thickness envelope flap



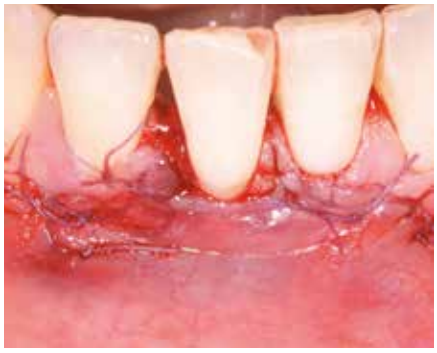
De-epithelialization of the papillae



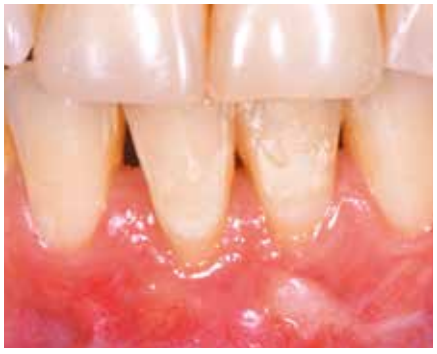
Connective tissue graft



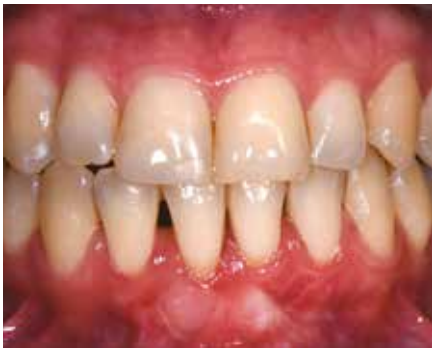
Sutures



Coronally advanced flap with the connective tissue graft to the CEJ



Surgey site after 6 months



1 year after surgery

the clinical situation was photographically documented and the pictures taken with the intraoral scanner were shown to the patient in order to include her in the evaluation of the local, aesthetic and biomechanical risk factors (Papapanou et al. 2017). The patient is affected by a class III gingival recession of 12 mm according to the Zucchelli classification in tooth #41.

NON-SURGICAL PERIODONTAL THERAPY

The motivational approach towards healthy lifestyles and the non-surgical periodontal therapy should be tailored to the patient before, during and after the surgical procedures.

BEFORE THE SURGERY

The anti-COVID-19 measures were put in place (Ministero Della Salute, 2020). The three-tone plaque disclosing gel containing Erythrosine was applied to the oral cavity surfaces in order to carry out the deplaquing and debridement through the D-BIOTECH Clinical Approach (Dental BIOfilm Detection Topographic Techniques): the assessment of the shape of the existing bacterial biofilm can be used to encourage the patient to improve their oral hygiene at home especially in the more retaining areas, to select the most suitable technologies and clinical approaches to identify the areas with the highest risk of inflammation. Managing the bacterial biofilm in the interproximal spaces was found to be inefficient.

The periodontal debridement is not going to be carried out manually to avoid inducing a recession of the interdental papillae and the nearby soft tissues (Zucchelli, 2011).

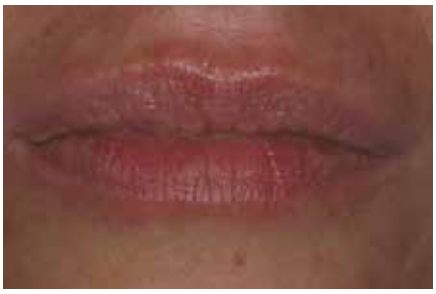
The non-surgical periodontal treatment was performed using the Comby touch (Mectron) device, consisting of a multifunctional piezoelectric sca-

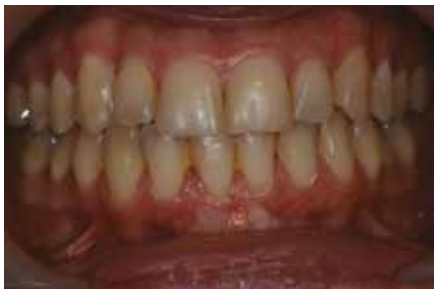
ler and a water jet, air and a sodium bicarbonate and glycine powder polisher. The debridement and deplaquing procedures were performed along the operations of double surgical aspiration and OzoActive virucide aspiration (ozonized water that through an aerosol function works as a biocide, fungicide, bactericide and virucide). The polishing process during the deplaquing stage utilized air and glycine powder, which particles were <63µm. The implementation of a handpiece that can rotate to 90° or 120° allowed for an efficient clinical intervention which did not damage the mucogingival tissues while also being as non-invasive as possible. The professional should evaluate and choose the most suitable powder depending on the clinical status of the oral cavity according to the tailored approach. Glycine powder, which particle size was around 25µm, was selected for the deplaquing. The soft setting was then selected in order to regulate the vibrations intensity.

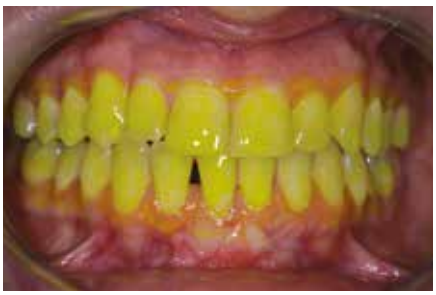
Combi Touch Mectron

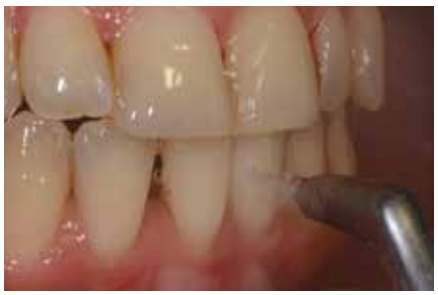
ORAL HYGIENE AT HOME

The patient was then encouraged towards carrying out the mechanical management of the bacterial biofilm at home with a "shared and personalized tailor-made" protocol (Nardi et al, 2016). This protocol involves an accurate evaluation of the behaviour tendencies and skill of each patient while performing oral hygiene care tasks. It is not necessary to instruct the patient on the different ways of brushing their teeth, however it is essential to discuss and agree on the most suitable tools to use in the various clinical and anatomical dental situations. The patient was not passive during the treatment process but through the interaction with the professional she agreed on the treatment options that appeared to be the most appropriate after a careful clinical evaluation. The patient was invited to adopt a non-traumatic but efficient brushing technique in order to apply a more careful management of the areas that retain more dental plaque.

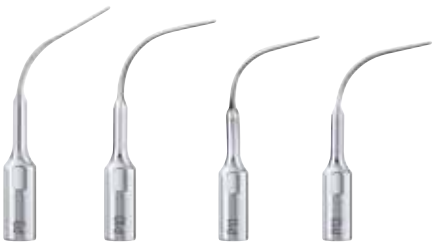




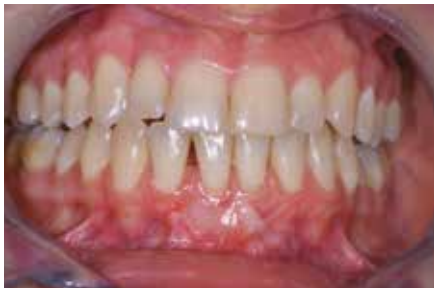


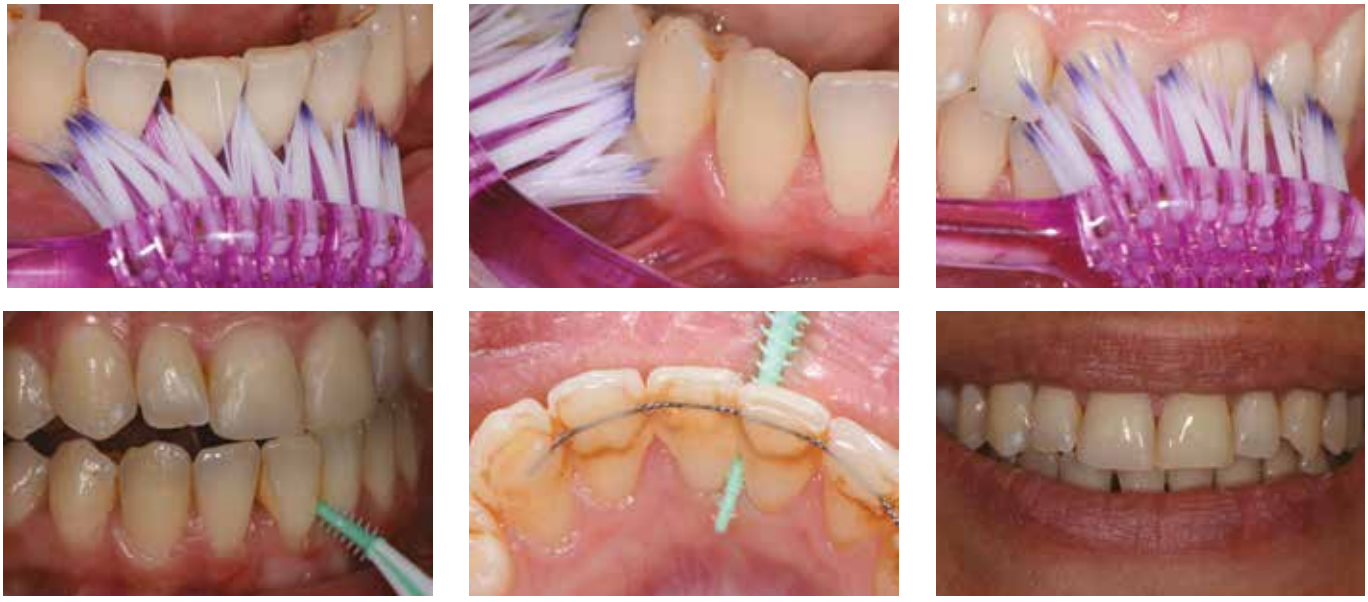


Mectron OzoActive



Periodontal ultrasonic inserts: P3, P10, P11, P12 (Mectron)





OZONE THERAPY AT HOME

The patient was instructed to use the ozonated olive oil mouthwash Ialozon Blu (GEMAVIP) twice a day, each time for 30 seconds. The ozonated olive oil has anaesthetic, anti-inflammatory and antioedema properties due to the reversible action of the neurofibrils which regulate the level of pain and oxygen transport to the inflammation site (7,10). Recently, numerous studies (11) determined the efficiency of the combined use of the ozonated olive oil contained in the mouthwash on the restoration of the gingival tissue conditions, on the reduction of the plaques clusters and on the treatment of the chronic gingival phlogosis (Nardi et al, 2020b). The patient was advised to apply the chemical instead of the mechanical at home management of the bacterial biofilm in the operation site to avoid potentially damaging the gingival tissue. The patient was informed not to brush the recession site and to apply the Ialozon gel (GEMAVIP) (Nardi et al. 2020a). A bilaminar trapezoidal flap surgery with a palate connective tissue graft was scheduled due to the extension of the recession, to the existing mesial and distal papillae and to the integrity of the cemento-enamel junction in tooth #41 (Zucchelli et al. 2003).

PROFESSIONAL OZONE THERAPY

Perioral 3 is applied on the stitches. In case of periodontal disease, a suitable antiseptic is going to be applied on the affected area with a 3 ml disposable syringe after the periodontal debridement session. The patient should not rinse or eat anything in the 30 minutes following the product application. Solid food can be consumed after 3 hours.

Among the oral cavity antiseptics, Perioral 3 is non-traumatic, antiseptic and anti-inflammatory medical solution that allows for the maximum patients' comfort. Perioral 3 stands out because of its chemical composition consisting of natural elements which makes for an innovative and efficient solution that is even suitable for those patients with nickel, lactose and gluten allergies or intolerances.

The active components comprise:

- Ozonated EVO olive oil which when activated combines the therapeutic effects of the olive oil to the active ozone molecules. Therefore, the product has antibacterial, fungicide and anti-inflammatory properties which specifically target the epithelial restoration.
- Cetilperidiunum which has bactericide and antiseptic effects.
- Chlorphenesin is an antimycotic and myorelaxant agent.
- Low-Molecular-Weight (LMW) Collagen is easily absorbed and targets the cellular regeneration.
- LMW and High-Molecular-Weight (HMW) Hyaluronic acid which promotes the cellular regeneration and does not affect the natural shade of the dental enamel.

Professionals endorse the use of specific mouthwashes containing ozonated olive oil and hyaluronic acid (Ialozon GEMAVIP) which have anaesthetic, anti-inflammatory, antioedema, antiseptic and healing properties and reactivate the microcirculation.

ADHERING TO AN AT HOME ORAL HYGIENE THERAPY WITH THE HELP OF ADVANCED TECHNOLOGIES: TBM AND DIGITAL ORAL HYGIENE MOTIVATION APPROACH (DOHMA)

Patients undergoing mucogingival surgical treatment need accurate and constant follow-ups. COVID-19 restrictions urged professionals to use telemedicine methods. The DOHMA clinical approach establishes a new follow-up tactic where teleconsultation appointments are scheduled allowing for the evaluation of the clinical situation through listening to the patient, and remotely sharing and discussing clinical pictures. The professional-patient interaction is essential to the monitoring of the clinical index, of the clinical evolution, of the presence of inflammation or gingival oedema, of the colour of the mucosa, and of the possible presence of discoloration. The patient can report on the symptoms: the presence of painful symptoms,

potential bleeding during brushing, dentine hypersensibility, tongue dryness, the potential lack of taste perception or presence of unpleasant smells in the oral cavity, in which case the patient can carry out the sniff test in order to detect possible halitosis. The patient is further motivated towards the biofilm control and is presented with an individual maintenance procedure which is agreed upon by the patient and the professional through the DOHMA. This approach includes a revaluation stage during the teleconsultation, in order for the professional to support the clinical evolution of the patient in case it is not objectively possible for them to go to a dentist's office. Patients claim they are satisfied by the way in which issues are solved during the DOHMA teleconsultation. This ergonomic and efficient approach regarding the monitoring of the patients' health leads to a more thorough control of the oral hygiene at home and of the possible existence of painful symptoms. Therefore, a personalized and shared patient-professional relationship can be maintained. The continuous clinical discoveries contribute to the identification of the most suitable tools to solve any highlighted issue, accomplishing an absolute at home compliance.

CONCLUSIONS

Oral health maintenance requires an integrated approach consisting of:

- The constant critical evaluation of the scientific evidence
- The careful assessment of the biological, psychological and social aspects of the patient
- The professional's clinical experience

Regarding the causal therapy management during mucogingival surgeries, professional and at home ozone therapy has been found to be beneficial because of its biostimulant effects on tissues and its analgesic properties, and because of its antioedema, anti-inflammatory and analgesic effects during the post-surgery treatment. The patients' well-being is favoured by the selection of ergonomic and less invasive technologies.

Reference list

Arweiler NB, Netuschil L. The Oral Microbiota. Adv Exp Med Biol. 2016; 902:45-60.

Cortellini P, Bissada NF. Mucogingival conditions in the natural dentition: Narrative review, case definitions, and diagnostic considerations.. J Periodontol. 2018 Jun;89 Suppl 1:S204-S213.

Garmyn P, Van Steenberghe D, Quirynen M. Efficacy of plaque control in the maintenance of gingival health: plaque control in primary and secondary prevention. In: Lang N.P. Proceeding of the European Workshop on Mechanical Plaque Control. Chicago: Quintessence Publishing, 1998; 107-120.

Lang NP, Tan WC, Krähenmann MA, Zwahlen M. A systematic review of the effects of full-mouth debridement with and without antiseptics in patients with chronic periodontitis. J Clin Periodontol. 2008 Sep;35(8 Suppl):8-21.

Nardi GM, Cesarano F, Papa G, Chiavistelli L, Ardan R, Jedlinski M, Mazur M, Grassi R, Grassi FR. Evaluation of Salivary Matrix Metalloproteinase (MMP-8) in Periodontal Patients Undergoing Non-Surgical Periodontal Therapy and Mouthwash Based on Ozonated Olive Oil: A Randomized Clinical Trial. Int J Environ Res Public Health. 2020 Sep 11;17(18):6619.

Papapanou PN, Sanz M, et al. Periodontitis: Consensus report of workgroup 2 of the 2017 World Workshop on the Classification of Periodontal and Peri-implant Diseases and Conditions, S162-S170.

SICOI-Società Italiana Di Chirurgia Orale e Implantologia. (2011). SICOI-Manuale di Chirurgia Orale. In Elsevier (Ed), Tecnica Chirurgica Laser (pp. 538-539).

Van Dyke TE, Sheilesh D. Risk factors for periodontitis. J Int Acad Periodontol. 2005 Jan;7(1):3-7.

Verrusio C, Iorio-Siciliano V, Blasi A, Leuci S, Adamo D, Nicolò M. The effect of orthodontic treatment on periodontal tissue inflammation: A systematic review. Quintessence Int. 2018;49(1):69-77.

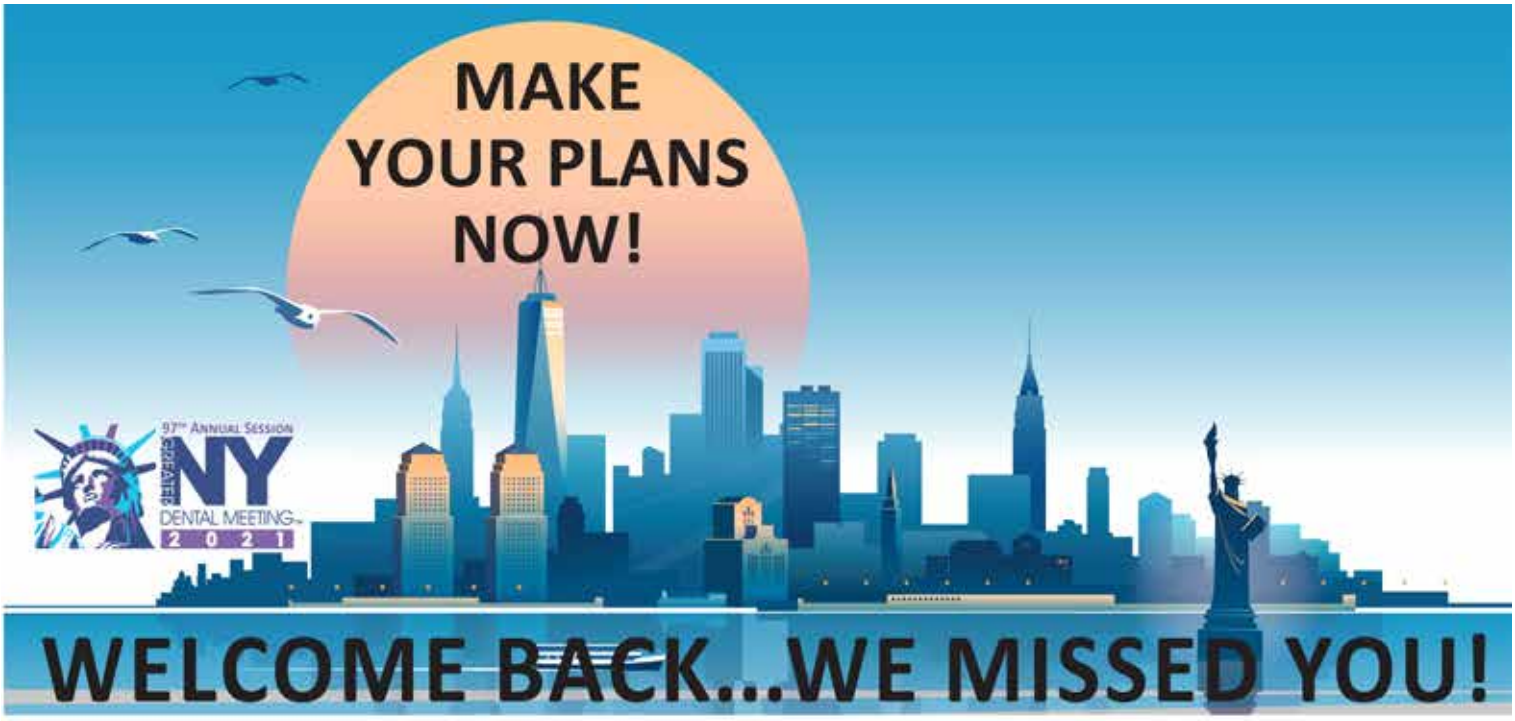
Westfelt E, Bragd L, Socransky SS, Haffajee AD, Nyman S, Lindhe J. Improved periodontal conditions following therapy. J Clin Periodontol. 1985 Apr;12(4):283-93.

Zucchelli G, Amore C, Sforza NM, Montebugnoli L, De Sanctis M. Bilaminar techniques for the treatment of recession-type defects. A comparative clinical study. J Clin Periodontol. 2003 Oct;30(10):862-70.

Zucchelli, G., Testori, T. and De Sanctis, M. (2006), Clinical and Anatomical Factors Limiting Treatment Outcomes of Gingival Recession: A New Method to Predetermine the Line of Root Coverage. Journal of Periodontology, 77: 714-721.

Zucchelli G. (2011) Chirurgia Estetica Mucogengivale. Quintessence Publishing. Trattamento della superficie radicolare (pp. 135-142)

Zucchelli G. (2011) Chirurgia Estetica Mucogengivale. Quintessence Publishing. Tecniche Bilaminari (pp. 449-488).



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B.M.S. Dental Hall 11.2 | Stand: O031
B&B Dental Hall 10.1 | Stand: B041
Bilkim Hall 11.2 | Stand: K080
Dental Devices Hall 10.2 | Stand: T024
DMP Hall 10.1 | Stand: B019
DynaFlex Hall 10.2 | Stand: R053
exocad Hall 3.2 | Stand: A020 C021
Forum Engineering Technologies Hall 2.2 | Stand: E040
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GMV Hall 2.2 | Stand: D010 E011 [Infodent Int'l Booth]
GNI Ortho Hall 3.2 | Stand: C050
IESS Group Hall 2.2 | Stand: C060
IMICRYL Hall 11.1 | Stand: B050
Interdent Hall 10.2 | Stand: O060
Lares Research Hall 10.2 | Stand: R057
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Lullubee Labs Hall 2.2 | Stand: D010 E011 [Infodent Int'l Booth]
Medical Precision Implants Hall 2.2 | Stand: D010 E011 [Infodent Int'l Booth]
Microcopy Hall 10.2 | Stand: R059
Miglionico Hall 11.2 | Stand: K020 L029
New Life Radiology Hall 11.2 | Stand: N030
Ningbo Ican Machines Hall 11.1 | Stand: C059 F059
Ningbo Runyes Medical Instrument Hall 11.1 | Stand: C020 D029
Pastelli Hall 10.2 | Stand: L066
Pierrel Pharma Hall 10.1 | Stand: B024 C025
RTI Electronics Hall 2.2 | Stand: A058
Saeyang Microtech Hall 3.1 | Stand: M065
Silfradent Hall 11.2 | Stand: O010 P011
Smiler Pro Hall 10.2 | Stand: L068 M069
Spident Hall 11.2 | Stand: L030 M031
Spiro Hall 2.2 | Stand: D010 E011 [Infodent Int'l Booth]
Spring Health Products Hall 2.2 | Stand: D010 E011 [Infodent Int'l Booth]
Steros GPA Innovative Hall 2.2 | Stand: B030 C031
Talleres Mestraitua Hall 11.1 | Stand: F010
Technology in Biomaterials Hall 2.2 | Stand: D010 E011 [Infodent Int'l Booth]
Teethline - Leonardo Acrylic Teeth Hall 2.2 | Stand: D010 E011 [Infodent Int'l Booth]
Tekne Dental s.r.l. Hall 11.2 | Stand: S040 T041
Thermoplastic Comfort Systems – TCS Hall 2.2 | Stand: D010 E011 [Infodent Int'l Booth]
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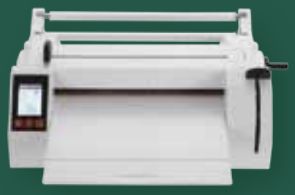

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