DENTAL TRIBUNE

The World's Dental Newspaper · United Kingdom Edition



PUBLISHED IN LONDON

www.dental-tribune.co.uk





CONSEURO 2015

Dental Tribune sat down with KCL professor Stephen Dunne in London to discuss the event and how technology is increasingly shaping the field of dentistry.



CONE BEAM CT

In just over a decade, digital imaging technology has exploded onto the dental landscape but is dentistry ready for a new standard of care?

► Page 12



PERIO TRIBUNE

Read the latest news and developments from the fields of periodontology and implant dentistry in our specialty section included in this issue.

► Page 17

Vol. 9, No. 2

IMPRINT

PUBLISHER: Torsten OEMUS

GROUP EDITOR/MANAGING EDITOR DT UK:

Daniel ZIMMERMANN newsroom@dental-tribune.com

CLINICAL EDITOR:

Magda WOJTKIEWICZ

ONLINE EDITOR: Claudia DUSCHEK

ASSISTANT EDITORS: Anne FAULMANN, Kristin HÜBNER

COPY EDITORS:

Sabrina RAAFF, Hans MOTSCHMANN

PRESIDENT/CEO: Torsten OEMUS

CFO/COO:

Dan WUNDERLICH

MEDIA SALES MANAGERS: Matthias DIESSNER

Peter WITTECZEK Maria KAISER Melissa BROWN Weridiana MAGESWKI Hélène CARPENTIER

MARKETING & SALES SERVICES:

Nicole ANDRAE

ACCOUNTING: Karen HAMATSCHEK

BUSINESS DEVELOPMENT:

Claudia SALWICZEK

EXECUTIVE PRODUCER: Gernot MEYER

AD PRODUCTION: Marius MEZGER

DESIGNER:

Franziska DACHSEL

Published by

DENTAL TRIBUNE INTERNATIONAL Baird House, 4^{th} Floor, 15–17 St. Cross Street London EC1N 8UW Internet: www.dental-tribune.co.uk E-mail: info@dental-tribune.com

Regional Offices

ASIA PACIFIC

DT Asia Pacific Ltd. c/o Yonto Risio Communications Ltd, 20A, Harvard Commercial Building, 105–111 Thomson Road, Wanchai Hong Kong Tel.: +852 3113 6177

Fax: +852 3113 6199

THE AMERICAS

Dental Tribune America, LLC 116 West 23rd Street, Suite 500, New York, NY 10001, USA Tel.: +1 212 244 7181

Fax: +1 212 224 7185

© 2015, Dental Tribune International GmbH

DENTAL TRIBUNE

All rights reserved. Dental Tribune makes every effort to report clinical information and manufac turer's product news accurately, but cannot assume or for typographical errors. The publishers also do not assume responsibility for product names or



BDA calls on new government to fix dentistry system

By DTI

London: The British Dental Association (BDA) has said that it will work with the new Conservative cabinet and members of parliament towardsabettercontractfordentistry in the UK. Remarking on last month's general election results, Chief Executive Peter Ward pledged his organisation will continue to fight for better recognition of dentists and distribution of funding for the profession under the new government.

"Healthcare was a central battleground between all of the parties in this election and I am sure you will all be interested what share of the £8 billion, promised by the Conservatives to the NHS, will be spent on provision of dentistry," Ward said during a special session at the British Dental Conference and Exhibition in Manchester.

Ward criticised that while all parties acknowledged the importance of dental care for the overall health system, little was actually mentioned in the party manifestos except for those of the Green Party and Plaid Cymru.



PM David Cameron during a election debate. The Conservatives will have to stand up to their promises for a 'new dentistry contract', the BDA said. © 1000Words/Shutterstock

"Doctors, nurses and midwives do wonderful work, but so too do dentists across the UK. With a political agenda that seeks to tackle the challenges of diet, alcohol, sugar and tobacco, it is clear that dentists have a role to play in a government strategy of prevention and integration in healthcare," he emphasised. Ward said that the BDA will be reaching out to the government's new health cabinet, as well as re-elected and new MPs, as soon as possible to follow up on critical issues, such as regulation. "The small majority means that every MP will have a stronger position to influence Parliament, so engaging with them will be all the more useful."

The election saw the Conservative Party securing a small but absolute parliamentary majority owing to Labour losing most of its seats north of the border to the Scottish National Party. With over 65 per cent, the election produced the highest participation of voters since 1995.

Only one British institution among top ten dental schools

By DTI

London: According to the QS World University Rankings by Subject 2015, Swedish dental schools are among the best in the world. With the Karolinska Institute tleading thelist of top dental schools and the University of Gothenburg following closely in third place, the country currently claims two of the world's best three dentistry faculties.

In second position, the University of Hong Kong is located in the

midst of the Swedish leaders. The list of top ten dentistry schools further includes the University of Michigan in the US at number four, KU Leuven in Belgium in fifth place and the Tokyo Medical and Dental University in Japan ranked sixth.

King's College London in the UK at number seven is the only dental school from Britain to have made it in the top ten list this year.

The QS World University Rankings are published annually by

Quacquarelli Symonds (QS), a British company specialised in education and study abroad. Its list comprises an overall university ranking and a variety of subject rankings. Dentistry is one of the six new additions to the individual subject rankings, bringing the total number of academic disciplines the report covers as of 2015 to 36.

The rankings are based on major global surveys of academics and graduate employers, as well as research citations data from the literature database Scopus. For the QS World University Rankings by Subject 2015, 85,062 academics and 41,910 graduate employers from 60 countries and 894 universities were asked to list up to ten domestic and 30 international institutions they consider excellent in categories such as a cademic reputation, citations per faculty and employer reputation.

The full QS World University Rankings 2015, as well as the rankings by subject, can be accessed at www.topuniversities.com.

Military dentist follows Cockcroft as Chief Dental Officer

By DTI

LONDON: After two months of searching, the National Health Service (NHS) has recently appointed Sara Hurley from the Royal Centre for Defence Medicine in Birmingham as new Chief Dental Officer (CDO) for England. She is the second woman to occupy the government advisory post after Dame Margaret Seward became CDO in

Hurley follows Dr Barry Cockcroft, who retired in February after holding the position for almost a decade. She received her bachelor's degree from the University of Bristol, and holds an MSc in Dental Public Health from University College London, as well as a King's College London MA in Defence Studies.

Appointed as a Queen's Honorary Dental Surgeon last year, she has also $served \, as \, Chief \, Dental \, Of ficer for \, the \,$ Royal Army, among other posts.

In her recent position at Queen Elizabeth Hospital Birmingham, she has worked with the NHS to assure access to and quality of health care for injured military personnel. In her new role, Hurley will work in partnership with other directorates, domain leads and other $clinical \, leaders \, in \, regional \, and \, local \,$ area teams to improve outcomes for patients, and champion the role of dentists and dentistry within the health system, the NHS said in

Hurley commented that as CDO she will be working collaboratively across the breadth of the dental health care profession to develop ideas that will contribute to achieving quality health outcomes and better oral health for all.

Several dental associations in the UK have responded positively to the appointment. "This is the time for new beginnings, fresh eyes and renewed relationships, and we intend to approach her appointment in that spirit," Chair of the British Dental Association's Principal Executive Committee Mick Armstrong said. "Building an effective working relationship is in the best interests of both our patients and our profession, and genuine engagement will be reciprocated."

"In a country where marked inequalities in children's oral health persist, we look forward to working with her on the long overdue care pathway for children's dentistry. Our commissioning group is ready and waiting to progress this vital piece of work," British Society of Paediatric Dentistry spokesperson $Claire\,Stevens\,commented.\,``We\,are$ looking forward to a long and productive working relationship with

BDIA extends contracts with London and Birmingham venues



LONDON & BIRMINGHAM: The British Dental Industry Association (BDIA) has announced that it signed new contracts with both the NEC in Birmingham and the ExCeL London Exhibition and Convention Centre in April to hold its Dental Showcase for another three years in each venue. Alternating between the two cities, the annual dental show attracts up to 10,000 visitors every year.

According to the BDIA, the contracts secure its partnership with ExCeL London for the upcoming shows in 2016, 2018 and 2020. The NEC, which will host this year's edition in autumn, has agreed to host the event in 2017 and 2019.

With an overall space of 186,000 m², the NEC is Britain's largest exhibition centre. It also hoststhe Dentistry Show organised by CloserStill Media in Coventry every year in spring. The BDIA's partnership with ExCeL London began in 2002. Last year's show there saw an overall attendance by 350 exhibitors and 9,500 professional visitors, according to the association.

"It is not easy to find suitable venues for a show of this size so securing contracts with both ExCeL and the NEC that will give us stability $for the \, next \, six \, years \, is \, a \, significant$ achievement for us," Executive Director of the BDIA Tony Reed said.

An ExCeL London representative commented that his company is committed to helping the event grow with further investment in the venue's infrastructure in the year's to come.

The next edition of the Dental Showcase is scheduled for 22-24 October at the NEC.

New initiative aims to improve oral health of care home residents

LONDON: Several studies have found that the oral health of care home residents is often poor and that in many cases carers have not received specific training to help residents with their daily oral hygiene routine. This problem is now being tackled in a new British health initiative that was recently launched by Health Education Kent, Surrey and Sussex, supported by research from the University of Greenwich's Centre for Positive Ageing.

It is predicted that by 2020, around 20 per cent of the UK population will be aged 65 years or

people have to face a deteriora- initiative stated. tion in physical and cognitive abilities and often need care.

The Improving Oral Health of Older Persons Initiative aims to improve oral health and quality of life for older people living in residential care homes in Kent, Surrey and Sussex through education and training of care home staff. "By helping to raise awareness of the importance of good oral health, both for quality of life and for general health, and by introducing oral health training for carers within this community, we aim to establish a sustainable quality standard for the oral

older. With increasing age, many healthcare of older persons," the

In order to implement its measures, the initiative builds on research into the experiences of older patients and their carers by Dr Paul Newton, a research fellow at the Centre for Positive Ageing. Newton is an expert in patient empowerment and the management of chronic conditions. His work for the initiative has led to new training methods and information for carers of people living with dementia.

"Research about identifying and managing dental pain and oral health problems for people living with dementia was lacking-both in the literature and in previous initiatives," Newton said. "We have worked closely with the Older Person's Initiative to make sure the oral health needs of this vulnerable group are addressed."

Problems with teeth, gums and dentures can significantly affect the overall well-being of an older person and his or her quality of life. There is a range of oral health challenges for elderly people, including loosening teeth, dry mouth and difficulty with eating and using a toothbrush. These in turn can lead to poor nutrition, low self-esteem, social isolation

and the exacerbation of other conditions, such as diabetes and cardiovascular disease.

Health Education Kent, Surrey and Sussex is a local education and training board, authorised as a sub-committee of Health Education England. It was established in April 2013, when it took on the functions of the old Kent, Surrey and Sussex Deanery, and aims to ensure that health care providers across the region have suitable staff with the necessary skills.

The Centre for Positive Ageing, based in the university's Faculty of Education and Health, brings together 12 research clusters from across the university. It aims to understand and develop solutions to the problems facing individuals, like chronic pain and dementia, as well as those confronting society, such as meeting the care needs of a growing older population.

UK News 03 Dental Tribune United Kingdom Edition | 2/2015

Victorian baby teeth could help predict future health of children today

By DTI

BRADFORD/DURHAM: A team of researchers at the University of Bradford and Durham University has analysed the teeth of children and adults from two nineteenthcentury cemeteries and found that the biochemical composition of teeth that were forming in the womb and during a child's early years provides insight into the health of the baby's mother and the future health of the child. These findings could help to develop a simple test on baby teeth to predict potential health problems in adulthood.

The analysed teeth came from a cemetery at a workhouse in Ireland where famine victims were buried and from one in London that holds the graves of some of those who fled the famine. According to the researchers, the biochemical composition of the examined teeth not only provided insight into the health of the baby's mother, but even showed major differences between those infants who died and those who survived beyond early childhood. Earlier work led by study authors Drs Janet Montgomery and Mandy Jay from Durham's Department of Archaeology found similar results in people living in the Iron Age on the Isle of Skye and in Neolithic Shetland.

Lead researcher Dr Julia Beaumont from Bradford's School of Archaeological Sciences explained: "We know that stress and poor diet in mothers, both during pregnancy and after birth, can have an impact on a child's development. In the past that could mean a child didn't survive; now it's more likely to

mean a child has a greater risk of health issues in later life. While sometimes there are obvious signs of maternal stress in the baby at birth, such as a low birth weight, that isn't always the case. So a simple test on teeth that are naturally

four months' growth, starting in the womb, enabling it to be linked to a specific period of a baby's life.

These indicators have also been thought to show when a baby has been breastfed, which is seen as a

cemetery who lived during a period of high rates of infant death. Beaumont believes that—far from being an indicator of a good start in life the higher nitrogen isotope levels showed that the mothers were malnourished and under stress.



 $Dr \textit{Julia Beaumont from the University of Bradford and her colleagues analysed teeth from two nine teen th-century cemeteries and the properties of the description of the descriptio$ to discover how baby teeth may help to predict a child's future health. © University of Bradford

shed by children as they grow could provide useful information about future health risks."

Levels of carbon and nitrogen isotopes within bone and teeth, and the relationship between the two, change with different diets, so baby teeth can reveal clues about the diet of the mother during pregnancy and the diet of the child immediately after birth. The first permanent molar also forms around birth and is retained into adulthood. Each layer of the tooth relates to around

healthy start in life. Nitrogen isotope levels are higher in people on protein-rich diets and in breastfed babies, and lower for vegetarian diets. However, in the samples taken from the famine cemetery, the results were counter-intuitive. The babies who showed higher nitrogen isotope levels at birth did not survive into adulthood. Those who did survive had lower and more stable nitrogen isotope levels throughout early childhood. Similar results were found among Victorians buried in the London

"At the period we studied, it's likely that most babies were breastfed, but only some showed the spike in nitrogen isotope levels normally associated with it," she said. "Where pregnant and breastfeeding mothers are malnourished however, they can recycle their own tissues in order for the baby to grow and then to produce milk to feed it. We believe this produces higher nitrogen isotope levels and is what we're seeing in the samples from the nineteenth-century cemeteries. Babies born to and breastfed by malnourished mothers do not receive all the nutrients they need, and this is possibly why these babies didn't survive."

Beaumont now hopes that the insights gained from the historical graves can be used to help children $in the future. If similar patterns\, can \\$ be seen in current-day mothers and children, she hopes this could lead to a simple test on baby teeth to predict potential health problems in adulthood.

She is currently testing teeth from children through the Born in Bradford project, a long-term study of a cohort of 13,500 children, born between 2007 and 2010, whose health is being tracked from pregnancy through childhood and into adult life.

She hopes to be able to correlate nitrogen and carbon isotope levels to the medical history of the mother and the future health of the children. "We currently cannot analyse any other tissue in the body where the stress we are under before birth and during early childhood is recorded," Beaumont stated. "If we can show that baby teeth, which are lost naturally, provide markers for stress in the first months of life, we could have an important indicator of future health risks, such as diabetes and heart

The study, titled "Infant mortality and isotopic complexity: New approaches to stress, maternal health, and weaning", was published online in the American Journal of Physical Anthropology on 13 March ahead of print.

Periodontitis linked to heart attacks in kidney disease patients

the adult population suffers from chronic kidney disease (CKD) and those affected often have poor health outcomes owing to an in $creased\,incidence\,of\,cardiovas cular$ disease compared with the general population. A team of researchers at Aston University recently found that treating a common gingival condition in CKD patients could significantly reduce their risk of potentially fatal heart disease.

CKD progressively worsens kidney function, raises blood pressure, and can cause progressive vascular injury and heart disease.

suggests that increased mortality malfunction and leading to clots **BIRMINGHAM:** Over 10 per cent of in people with CKD may be linked and narrowing of the arteries. with chronic inflammatory conditions such as periodontitis, which causes gingival inflammation, loss of the bone that supports the teeth and ultimately tooth loss.

> Previous studies have found that more than 85 per cent of people with CKD have inflammatory gingival problems, caused by inadequate removal of dental plaque from between the tooth and gingival margin and made worse by impaired immunity and wound healing. Experts have identified that bacteria in the mouth can enter the bloodstream through periodontal

Thelatestresearchattheuniversity conditions, causing blood cells to

Dr Irundika Dias of Aston's School of Life and Health Sciences is currently leading a study into the underlying causes of increased cardiovascular disease and outcomes of accelerated progression observed in people with CKD and periodontitis. She will observe how successfully treating periodontitis reduces oxidised lipids and inflammatory cell activity in people with CKD, thereby lowering their risk of life-threatening heart disease.

 $\hbox{``This project has the potential to}\\$ make a real difference for people

with CKD. If we can prove managing periodontitis reduces the threat of cardiovascular disease then it may well represent an efficient and cost effective treatment for CKD," Dias stated. "In conjunction with our study, I will be talking to dental schools about alternative ways of helping periodontitis patients. It is vitally important to keep your gums healthy and have regular dental check-ups to avoid the onset of a disease that is very common, poorly appreciated by the public and causes tooth loss resulting in reduced quality of life."

The study will involve 80 people, including healthy volunteers and 60 people with CKD, both with and without periodontitis. Among these will be a group of 20 people with CKD and periodontitis who will be rando $mised \ to \ have the gingival condition$ clinically treated over a 12-month period. They will be reviewed at three-monthly intervals to assess markers of cardiovascular disease, such as oxidative stress biomarkers in the blood and arterial stiffness.

The project is part of a collaboration between Dias and Prof. Helen Griffiths of Aston's School of Life andHealth Sciences, Prof. Iain Chapple, Head of Periodontology at the University of Birmingham, and Prof. Paul Cockwell, consultant nephrologist at University Hospitals Birmingham NHS Foundation Trust.

"Holding ConsEuro in London was a little bit of a risk"

An interview with Prof. Stephen Dunne, King's College London Dental Institute



Prof. Stephen Dunne is also Professor and Chairman of the Department of Primary Dental Care at Kings College London—Dental Institute.© Daniel Zimmermann/DTI

As one of many dental organisations to do so, the European Federation of Conservative Dentistry (EFCD) chose to hold its international congress in the UK this year. *Dental Tribune UK* sat down with EFCD President and King's College London professor Stephen Dunne in London to discuss the event and how technology is increasingly shaping the field of dentistry.

Dental Tribune UK: Prof. Dunne, the ConsEuro conference in London seems to have been excellently organised. Would you say that the event has met your expectations?

Prof. Stephen Dunne: To be honest, holding ConsEuro in London was a little bit of a risk because with all the other conferences to be going on this year in the capital and other parts of Britain there could be an overload. We actually spent months discussing a window in which we would attract the highest number of delegates. With 500 and growing so far, the congress has clearly exceeded our expectations and, while previous congresses in Italy or Turkey might have had a bigger turnout, the conference here has attracted delegates from 29 countries, including from Australia, the US and the Middle East. It is probably one of the most multinational conferences we have ever had.

You were originally planning for 350–450 participants. Can the outcome mainly be attributed to the London factor?

While we chose one of the best conference centres in the world with the Queen Elizabeth II Centre right in the heart of London, it is fair to say that we also chose one of the most expensive ones. This made us very concerned when we planning this three years ago because at that time we were in an economic downturn. Trying to request sponsorship from companies was difficult back then. They were all downsizing and did not have any money to spare for conferences.

Owing to the economic situation gradually improving over time, we exceeded our expectations with regard to sponsorships. We actually sold out the exhibition space several months ago. That has been very successful and helped us to cover the costs. We came above breakeven on the first day, so I am much more relaxed today than I was yesterday morning. And it looks as though we might make a reasonable profit, which would then be shared between the EFCD and King's College London.

King's recently made it on to the list of the top ten best dental schools globally. How much do you think the school's reputation contributed to the congress outcome?

There are a number of dental schools surveys and rankings worldwide. Despite different me-

thodologies and different variables, King's usually comes out very near the top, which I am very pleased about. The school attracts not only good teachers and researchers, but also equally good clinicians from across the world.

year here at ConsEuro 2015, we have an evidence-based start, followed by clinical applications and handson sessions after lunch-time that help practitioners get to grips with equipment they heard about and want to have a chance to play with. That is very attractive to clinicians and you can see a great deal of interest there.

suitable for clinicians to provide

evidence-based knowledge for the

work that they do. Therefore, for

every session that we have this

The programme for ConsEuro 2015 is very focused on technology issues. Would you confirm this to be the overall theme of this conference?

From the beginning, we planned this to be a very high-tech conference. In society and certainly in dentistry, medicine or surgery, technology is becoming increasingly important. And while air turbines and scalpels are still staples of the trade, there is a huge amount of technological equipment coming onto the market for operative work, dental surgery, logistics and communication.

Our belief is that dentists need to know about all of these things, as well as to have an understanding

Technology has clearly expanded the scope of this conference. Does this also apply to clinical practice?

Almost every dental practice across the world now employs some form of technology, be it electronic patient records, stocktaking or equipment, such as lasers, CAD/CAM and digital imaging to show patients areas of the tooth they could not possibly see otherwise. Digital imaging and photography are also very important from a medical and legal point of view, as this area is increasingly becoming a concern

Where do you see the trends with regard to dental materials?

The materials that we use now were not available to me when I was in training and in my early practice and the stages or requirements for their use are infinitely more sophisticated. Nowadays, you might have ten stages to a bonding procedure and every one of those stages is critical. If you fail in only one of them, your restoration fails before it has even started.

Historically, dentists have been trained by representatives of the companies who make the materi-

"From the beginning, we planned this to be a very high-tech conference."

When I first joined the EFCD about ten years ago, there was very much an effort to compete with the International Association for Dental Research, so it was very focused on academics and researchers from the universities. My view is that this was a mistake, as we really need to provide a conference that has interest across the board, so it must have academic content of excellence to attract researchers and teachers, as well as clinical content

of the evidence base. Should they be using these things and, if they are using them, which particular model? This was very much the rational when we were planning the programme. We also ought to have a paperless conference. Our website and app have been very effective and when I read statements yesterday on our Twitter feed, participants commented that this was the most technologically advanced conference they have ever been too.

als and that means they may not get the most honest or scientifically valid perspective. Although we very much support manufacturers contributing to education programmes, we certainly like clinicians and scientists to be involved in those to provide the evidence base. This is exactly what we are doing here now.

What other lessons will you take home from the conference?

Our conference proves that you can take a high-tech approach and still hopefully be profitable or at least break even. Technology is definitely here to stay; we just need to look at the evidence base. We also need to have training in the use of technology and need to look at clinicians and scientists to guide us in the selection of the particular devices that we should use.

Thankyouvery much for the interview.

Almost every dental practice across the world now employs some form of technology..."

Bio-Emulation Colloquium 360°

4-5 July, 2015, Berlin, Germany

Mentors



Ed Mclaren



Michel Magne



Pascal Magne

Emulators



Akinobu Ogata (guest)



Andrea Fabianelli



Antonio Saiz-Pardo Pinos



August Bruguera



David Gerdolle



Fernando Rey



Gianfranco Politano



Jason Smithson



Javier Tapia



Jungo Endo



Leandro Pereira



Marco Gresnigt



Oliver Brix



Panos Bazos



Sascha Hein



Stephane Browet



Thomas Singh



Walter Gebhard (guest)

Details & Online Registration

www.BioEmulationCampus.com

Registration fee: 599 EUR +VAT



ADA C·E·R·P®



Tribune Group is an ADA CERP Recognized Provider. ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by boards of dentistry.

Tribune Group GmbH i is designated as an Approved PACE Program Provider by the Academy of General Dentistry. The formal continuing dental education programs of this program provider are accepted by AGD for Fellowship, Mastership, and membership maintenance credit. Approval does not imply acceptance by a state or provincial board of dentistry or AGD endorsement.



US to lower fluoride in drinking water after 50 years

By DTI

WASHINGTON, USA: US health authorities have updated their guidelines for fluoride in drinking

water and now recommend an optimal fluoride concentration of 0.7 mg/l. As Americans today have greater access to fluoride in the form of toothpaste and

mouthrinse and owing to the increasing incidence of fluorosis due to excess fluoride, the Department of Health and Human Services sought to replace its previous

recommendations that were issued in 1962.

Since the early 1960s, the practice of adding fluoride to public



drinking water systems has grown steadily in the US. Nearly all water fluoridation systems in the US have used fluoride concentrations ranging from 0.8 to 1.2 mg/l. With the recent update, however, this will be reduced by 0.1–0.5 mg/l, and fluoride intake from drinking water alone will decline by approximately 25 per cent. The total fluoride intake will be reduced by about 14 per cent.

According to the department's report issued on 27 April, the new optimal concentration of 0.7 mg/l was chosen to maintain caries prevention benefits, but reduce the risk of dental fluorosis.

Although a number of studies have found that community water fluoridation has led to a significant decline in the prevalence and severity of tooth decay, data from the 1999–2004 National Health and Nutrition Examination Survey and the 1986–1987 National Survey of Oral Health in US School Children indicate that over 20 per cent of people aged 6–49 have some form of dental fluorosis.

Today, nearly 75 per cent of Americans who are served by public water systems receive fluoridated water. In 2012, the Centers for Disease Control and Prevention estimated that approximately 200 million people in the US were served by 12,341 community water systems that added fluoride to water or purchased water with added fluoride from other systems.

Artificial fluoridation of drinking water remains controversial as a public health measure, as it has been suggested that excess fluoride may have adverse health effects. For instance, it has been associated with neurodevelopmental delays in children and with the development of attention deficit hyperactivity disorder only recently.

In contrast to fluoridation policy in the US, many western European countries, including Austria, Belgium, Finland, Germany and Sweden, do not fluoridate their water supply. Other European countries, such as Ireland and the UK, currently add fluoride to drinking water at levels ranging from 0.2 to 1.2 mg/l.





The WaterLase iPlus Version 2.0.

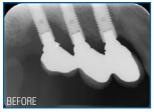
from the global leader in dental lasers, expands and enhances the treatments you can offer your patients, reflecting the almost universal interest in practice growth.

- ★ Delight patients with gentle, minimally-invasive procedures
- **★** Expand your treatment offerings with REPaiRTM
- ★ Enable faster healing times and improved comfort*
- **★** All-new SureFire™ YSGG Delivery System, the new gold standard in all-tissue laser delivery systems

WaterLase is the all-tissue laser trusted by the most dentists worldwide, with over 27,300,000* patients treated. Its unrivaled clinical versatility — with the ability to treat hard tissue, soft tissue and bone — gives you unmatched results in treatment outcomes and outstanding ROI... making it the essential addition for your successful practice.



Regenerative Er, Cr: YSGG Periodontitis Regimen





Courtesy of Dr. Rana Al-Falak



"The WaterLase iPlus is an integral part of every procedure I do. The results we achieve are outstanding, with so much less stress, so much more fun and so much more comfort for patients."

— Dr. Rana Al-Falaki, London, UK

Introducing the New and Improved

VaterLase | Plus |
Version 2.0

SureFire

REPaiR



Upgrade Available for current WaterLase iPlus owners.

Grow your practice with WaterLase.

Contact your BIOLASE distributor today.



Practice Growth. Assured.

"We are still pretty much in shock"

An interview with Nepalese dentist Dr Sushil Koirala

In one of the worst earthquakes in over 80 years, more than 10,000 people are believed to have died in the Federal Democratic Republic of Nepal. Living in and practising dentistry in the capital of Kathmandu, dentist Dr Sushil Koirala has been directly affected by the disaster. *Dental Tribune* had the opportunity to talk to him briefly about the situation in the country and how the international community can help it to overcome the humanitarian crisis.

Dental Tribune: The earthquake on 25 April had a devastating effect on your country's infrastructure and its people. What is the situation currently in Kathmandu, and how have you been affected personally?

Dr Sushil Koirala: The situation in Kathmandu at present remains very difficult owing to the extensive damage to many public buildings, government offices and schools. Nearly 7,500 lives have been lost and 14,500 people have been injured. Those who survived the earthquake are traumatised.

While physically my family and I are fine, we are still pretty much in shock. My children are very distressed because they were alone at home during the first episode of the earthquake. Some of my staff from the hospitals and clinics lost their houses



Monk looking at destruction caused by the 25 April earthquake in the Nepalese capital Kathmandu. Damages are estimated at US\$200 million. \odot Narendra Shrestha/EPA

and Sindhupalchowk districts of Nepal's Central Region, as well as the Gorkha District of its Western Region.

Have you received any correspondence from the dental community?

fore, is hampered and support items cannot be delivered on time. Many people in these small villages are still waiting for basic items, such as food and shelter.

Regardless of the efforts by the Nepalese army, police and Red Nepal's development budget depends mainly on foreign aid. Rebuilding all the infrastructure affected by the earthquake will require an estimated US\$200 billion. The government plans to meet this mainly through foreign and international funding. However, damaged infrastructure will definitely affect the economic growth of Nepal negatively.

When I will be able to start practising again depends on when all my staff are mentally ready for work. Daily life in Kathmandu is still very stressful, as there are frequent aftershocks and people are still terrified. Under these conditions, I do not expect people will come for general dental treatment, except in the case of an emergency.

What do you consider the most important to improve your situation, and how can the international dental community help?

More than 95 per cent of houses and infrastructure have been damaged in the affected

villages, so the rehabilitation $phase for the \, earth quake \, victims$ is going to be a great challenge for our country. I personally feel that in order to overcome this difficult time our country needs support from each individual and professional in Nepal. We have, therefore, started a humanitarian project, the Dental Community for Humanity-Nepal Earthquake Relief Project, under the umbrella of the Punyaarjan Foundation, a charitable and non-profit organisation dedicated to supporting people most in need. This project aims to support poor children living in these remote villages in particular. I humbly appeal to the international dental community to support this cause. Please, with your donations and support, we can bring back the smiles of our poor children.

Dental Tribune United Kingdom Edition | 2/2015

Thank you very much for taking the time and all the best for the future.

Editorial note: Dental Tribune spoke with Dr Koirala in early May. Since then Nepal has experienced a number of aftershocks. He and his family are in safety.



Dr Sushil Koirala

For more information on how to support the Dental Community for Humanity project, please contact Dr Koirala at drsushilkoirala@gmail.com.

"Daily life in Kathmandu is still very stressful, as there are frequent aftershocks and people are still terrified."

unfortunately and have to stay with relatives for the moment.

Have you heard from colleagues in other parts of the country, and if so what is their situation?

Most of my dental colleagues are unharmed, but many of them are facing problems with their damaged clinics. Most of the dental hospitals in Kathmandu are still closed owing to the damage and employees not being able to work because they are busy rebuilding their lives. Various agencies have estimated that more than eight million people across 39 of the country's 75 districts have been affected by the earthquake. The most severely affected areas include the Bhaktapur, Dhading, Dolakha, Kathmandu, Kavre, Lalitpur, Nuwakot, Ramechhap, Rasuwa,

I am glad to have received many e-mails with best wishes and prayers from our dental friends around the world. It is so gratifying to know that many of them have pledged their support of the earthquake victims of Nepal. Some dental manufacturers have shown keen interest to help us in the rehabilitation of children who have been affected.

Despite an immediate response from India and Western countries, relief efforts seem to be insufficient, according to reports. What is your impression?

International communities have offered immediate support and we really appreciate their help. However, 39 of the most affected villages are in remote locations with mountainous terrain. The relief work, there-

Cross Society, as well as national and international organisations, which are working 24/7, the manpower and supplies are still felt to be inadequate.

In your opinion, how will this disaster affect the infrastructure of your country in the long run?

Dental Community for Humanity

BUSINESS 09 Dental Tribune United Kingdom Edition | 2/2015

MIS says it is all in the shape

Implant solutions provider launches new implant at special event in London



MIS Product Manager Elad Ginat

MIS Implants Technologies launched a new implant at a special event in London that promises immediate biological benefits for better treatment outcomes. The new V3 is a multi-use implant suitable for a wide range of surgical scenarios, according to the implant solutions provider, and is ideal in anterior regions, as well as in regions where space and bone may be limited and good aesthetic outcomes are essential.

Designed in collaboration with leading clinicians, including Prof. Nitzan Bichacho and Dr Yuval Jacoby, both from Israel, as well as Dr Eric Van Dooren from Belgium, the development of V3 took two years to complete, MIS Product Manager

Elad Ginat stated. He said that it will be available to visitors to EuroPerio8 from Thursday and to clinicians worldwide in the upcoming months.

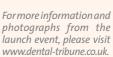
"MIS is immensely proud of our innovative position in the global implants industry, which has led to the development of the unique V3 implant system. It's a widely anticipated evolutionary next step in dental implant performance, designed for the benefit of clinicians and their patients all over the world," Ginat stated.

The design of V3 aims to provide both specialists and general practitioners with optimum flexibility in implant planning and placement for a restorative-driven approach. In particular, the triangular shape of the coronal portion is intended to encourage bone regeneration and to gain greater volume of bone in support of stable surrounding soft tissue for restorations with improved aesthetics. According to Ginat, the neck provides solid anchorage at three points in the crestal zone while forming three compressionfree gaps at the sides (between the implant and the osteotomy), thus



favouring conditions for better osseointegration, such as high primary stability, reduced bone compression and crestal bone resorption. The gaps encourage blot clot formation at the bone-implant interface to promote the initial scaffold-building process for bone growth and allow more space for blood pooling and the establishment of a stable blood clot. This way, V₃ provides clinicians with advantages from the start, achieving a greater volume of bone and soft tissue at the onset of implant placement.

A high-performance conical connection implant with platform switching, V3 also features a variablethread and self-tapping capability, micro-rings, a concave inter-thread for maximum bone-implant contact, as well as a flat apex supporting immediate placement engagement. Ginat added that clinicians $can enjoy all of these \, design \, benefits$ without having to learn new protocols. Furthermore, a dedicated surgical kit makes procedures especially simple, safe and accurate, resulting in ease of placement for the dentist and shorter recovery time for patients, he explained.





DENTSPLY introduces WaveOne GOLD

New single-file reciprocating technology to offer improved strength and flexibility



Dr Julian Webber © Daniel Zimmermann/DTI

generation of single-file reciprocating technology for use in endodontics at the Dentistry Show. WaveOne Gold features a number of improvements to its predecessor and is

Dental consumables manufacturer available to dentists in the UK im-DENTSPLY has introduced its new mediately, the company said. The previous system will be discontinued from October.

> According to London endodontist and WaveOne developer Dr Julian

Webber, the new system is aimed at existing WaveOne users, as well as general practitioners who practise endodontics but have limited time resources or are afraid of file breakage related to the use of NiTi files. WaveOne Gold, which has been heattreated to offer improved strength and flexibility, will allow them to treat a greater range of canal morphologies, he said. Therefore, the system features four files in-

stead of three as previously.

"We believe that the enhancements we have made in WaveOne GOLD will increase clinicians' confidence, help take away the fear factor and encourage them to take on cases considered too difficult in the past," Webber commented.

DENTSPLY premiered the WaveOne technology in 2011.



