Children’s oral health at stake as US votes for reform

Daniel Zimmermann
DTI

NEW YORK, NY, USA/LEIPZIG, Germany: Dental health associations in the US have hailed the decision of the US Senate to recognise a number of measures for improving the oral health status of children, including expanded coverage for pediatric oral health services in its health reform bill. The new health legislation, which passed the House of Representatives and its crucial first vote in the Senate in November, also contains a number of measures for improving prevention, training and resources for tracking and monitoring oral health data among vulnerable populations.

Dental caries is one of the most prevalent health problems in the US, and disparities in oral health are evident across ages. A report by the US National Maternal and Child Oral Health Resource Center states that although more than 90 percent of general dentists in the US provide care to children and adolescents, very few provide care to children under four. Amongst children and adolescents from families with low incomes, nearly 80 percent of decayed primary teeth have not been restored in children between the ages of two and five, the report states.

“The Senate has taken a historic step toward safeguarding the oral health of millions of Americans,” said Dr Burt Edelstein, chair and founder of Children’s Dental Health Project, a non-profit organisation based in Washington, DC. “As the bill moves toward passage in the Senate and a conference with the US House, it is vital to preserve these provisions.”

“We are confident that members of the House and Senate will remain steadfast in their commitment to oral health and will work together to ensure that the oral health measures contained in this legislation remain strong,” he added.

The Senate version of the sweeping health bill, which is the centrepiece of President Obama’s social policy and will cost more than US$800 billion over the next ten years, would extend coverage to 56 million people without insurance, while creating a government health insurance programme.

New oral health guidelines for people with diabetes

The International Diabetes Federation (IDF) recently presented new guidelines for the oral healthcare of patients with diabetes at the World Diabetes Congress in Montreal in Canada. The document, which is the result of collaboration between the IDF and the FDI World Dental Federation, reviews the latest clinical evidence of the oral health—diabetes relationship and provides dental professionals with recommendations regarding implementation of the guidelines.

Growing evidence affirms that poor oral health has a negative impact on the general health of people living with the condition. The IDF estimates that 285 million people worldwide will be living with diabetes in 2030. Numbers in regions like Africa and Asia are expected to increase by 50 per cent in the next twenty years, owing to economic development and the change of lifestyles.

WHO meeting decides to phase down amalgam

At a joint meeting of the WHO and the United Nations Environment Programme in November, experts have announced their support to “phase down” dental mercury use worldwide. Their decision follows a letter signed by over 70 non-governmental organisations from around the world called on the organisation to establish a schedule to phase out the use of dental mercury fillings as soon as possible. The group was also assessing alternative dental filling materials, such as composites and glass ionomers, for future use in dentistry.

Although banned in some markets, dental amalgam is still used in some developed and most developing countries. It is widely acknowledged that it poses a health risk to pregnant women and young children.

PRP therapy helpful for implants

New research has found that platelet-rich plasma therapy (PRP) offers potential for accelerated healing of dental implant procedures. Platelet-rich plasma, which is obtained from the patient’s own blood and triggers rapid growth of bone and soft tissue, recently gained acceptance in orthopedics and sports medicine.

Boston U eyes schools in Asia, ME

Officials from the Boston University, USA, have announced to look into the possibility of opening new medical and dental campuses in India and Abu Dhabi, United Arab Emirates. Since 2008, the University is running a dental school focusing on prevention-oriented research and dental services in Dubai’s Healthcare City.
Asia News

Dentcubator board meets in New York

Members and Associates of Dentcubator gathered in New York. (DTI/Photo Daniel Zimmermann)

Daniel Zimmermann

NEW YORK, NY, USA/LEIPZIG, GERMANY: Year after year, dental companies spend millions on the research and development of new products. Nobel Biocare as one of the biggest spenders in the dental industry uses about 4-5% of their annual turnover for R&D. On the other side, there are thousands of ideas developed by individual dentists that will never be implemented because their inventors lack the funds or expertise to market their ideas or are downsized by shrinking R&D budgets in difficult economic times.

For such ideas, there are usually incubators. Introduced in the late 1950s as physical buildings that housed many small businesses, these programmes have become a significant tool in the business world for assisting early-stage companies. Their main goal is to accelerate the successful development of entrepreneurial companies through support resources and services, such as finding attorneys, funding prototypes and finding distribution channels. Almost 90 per cent of start-up companies stay in business for the long term with the help of incubating programmes, a study by the University of Michigan recently found.

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Dentcubator is a virtual entity, which means that its members meet by phone, e-mail or through webinars. Once an idea is submitted through one of the committees, it undergoes a four-week screening process to evaluate its market potential. Special emphasis is placed on the ability to re-design a product for emerging markets like Asia or Latin America. By testing each submission for its applicability to emerging market countries, we have the opportunity to offer the products and techniques associated with outstanding oral health care to a broader audience than the typical markets of Western Europe, Japan or the United States,” a Dentcubator representative told Dental Tribune Asia Pacific in New York.

The network provides its services with compensation taken in equity in the ownership of the idea, once the idea has been approved for funding. The process typically takes up to three months to be completed. Once Dentcubator becomes an equity partner and develops and protects the idea, discussions are initiated with the directors of acquisitions R&D departments of global dental companies.

Dentcubator sees itself as a complement to traditional R&D and as an alternative source for funding, development and access to market resources. “We are under no circumstances in the business of replacing R&D budgets,” the representative said. “We are the nursery which takes the small seed of an idea, grows it and then brings it to market.”

Ideas or proposals can be sent to ideas@dentcubator.com.
Anxious people have worst teeth, study shows

Bollywood teams up with dental show

HONG KONG/LEIPZIG, Germany: Bollywood's biggest Gen-next star Deepika Padukone recently joined forces with the Indian Dental Association (IDA) and Wrigley India for an oral-care marathon at the World Dental Show 2009 in Mumbai. The former model, who had her big break as an actress in the 2007 feature Om Shanti Om, became an ambassador for Orbit sugar-free chewing gum in early 2009 and has represented the brand at public events since then. She is also the first actor in India to have partnered with a manufacturer to promote the oral health benefits of chewing gum.

The record 24-hour long dental check-up, called Mumbai Smiles – IDA fights against the Tooth Decay, aimed to provide free dental check-ups to underprivileged locals who cannot afford to visit a dentist on a regular basis, including school children, elderly people and temporary workers. People with symptoms of systematic conditions, such as diabetes or cardiovascular diseases, were examined by dental and medical experts from the University of California, San Francisco (US). The event was accompanied by an online campaign throughout October.

Dental care in India remains a neglected area and tooth decay has become common at a comparatively young age," Dr Paramjit Singh, President of the IDA, said. “Through this initiative here at the World Dental Show, our organisation and Orbit sugar-free chewing gum is trying to generate awareness on dental health and oral regime.”

The World Dental Show, organised by the IDA, is one of the biggest dental shows in India. According to the organiser, more than 20,000 visitors, including 18,000 dentists, attended the first show held in early October. The event is supported by the Association of Dental Industry and Trade of India and the University of California, San Francisco. The next show is scheduled for October 2010.

A new study from New Zealand has confirmed. Researchers from the University of Otago recently investigated the anxiety levels of 1,057 participants aged between 15 and 52. They found that dentally anxious people had almost twice the amount of decayed, missing or filled tooth surfaces by the age of 52 as people who are not dentally anxious.

In the study, participants were classified into three groups: those who had always been dentally anxious, those who had developed dental anxiety as adolescents, and those who had developed dental anxiety as adults. The first group had more tooth decay at age 5 and early experience of dentists. The second group had more tooth decay from the age of 15. The third group had lost tooth between the ages of 26 and 52. In addition, a ‘recovery’ group was discovered of people who had been dentally anxious at age 15 but had ceased to be so by the age of 52.

The findings will help dental professionals better understand what makes people dentally anxious, and inform them that some people can grow out of it, one of the researchers said.

In countries like New Zealand and Australia approximately 15 per cent of all people suffer from some form of dental anxiety.

Tooth Decay

Smiles – IDA fights against the poor oral health and related diseases are more likely to have people with anxious personalities are more likely to have gum disease.

People with anxious personalities are more likely to have poor oral health and related diseases. It is more likely that dentally anxious people will have more decayed, missing or filled tooth surfaces by the age of 32 as people who are not dentally anxious.

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Dear reader,

“This tooth is hard to pull out.”

Claudia Salwiczek
Editor
Dental Tribune International

The International Diabetes Federation publication Guideline: Oral Health for People with Diabetes addresses the reported bi-directional relationship of diabetes mellitus and periodontal disease. It has long been recognised that periodontitis is a complication of diabetes mellitus, and periodontitis has been suggested as the sixth clinical complication of diabetes. More recently, data has been published that suggests that metabolic control in diabetes is adversely affected by periodontitis. The mechanism that accounts for this association is the production of inflammatory mediators in the periodontal tissues, with a resultant elevation of serum levels of these mediators, leading to the desensitisation of peripheral insulin receptors.

The guideline group that prepared and wrote this report addressed two questions: “What level of surveillance for periodontal disease should be recommended for people with known diabetes?” and “Is active management of periodontitis particularly recommended for people with diabetes?” In response to both questions, the guideline group concluded that the evidence does not support an affirmative answer to either of these. Despite these conclusions, the publication provides recommendations for oral health care for persons with diabetes. These include an emphasis on the need to educate patients with diabetes that their periodontal health can be adversely affected by diabetes, the importance of regular personal and professional oral health care, and the need for periodontal care if periodontal disease is present.

The findings presented in this document are surprisingly limited in scope. While it is recognised that the committee did not have specific instructions regarding the amount of evidence required in order to be able to make a recommendation, the literature reviews cited in the guideline document provided solid evidence that periodontitis is more severe in patients with diabetes. Furthermore, while evidence suggesting that periodontal treatment can improve glycaemic control in patients with diabetes is not as solid, the trend observed in these studies is that the greatest beneficial effects are seen in cases in which the glycaemic control is very poor. It can thus be deduced that these patients require the most attention, as they are at the greatest risk for clinical complications of diabetes.

The provision of appropriate oral care to patients with diabetes mellitus will improve oral health, which in itself is a desirable outcome. Diabetes is a chronic disease that patients must manage on a daily basis. Appropriate oral health care, with a focus on prevention, can lead to a lifetime of good oral health, efficient mastication and a better diet, the last two of which can have important positive effects on weight control. Weight control is critical for glycaemic control.

Another important consideration is the likelihood that patients who practice periodontal care will have diabetes and not be aware of their diagnosis. In the US, approximately 25 per cent of patients with diabetes are not aware that they have diabetes. Given the increased prevalence of periodontitis in this patient group, careful examination by a dental professional (in identify advanced periodontal disease) and a thorough health history (that is, family history of diabetes, or a report by the patient of excessive thirst, urination and/or hunger) can suggest the need for evaluation of diabetes. If dental professionals are to assume this more active role, they need to be familiar with all aspects of diabetes mellitus, including risk factors, health history and clinical complications, and treatment approaches. This may require additional training, but the outcome will be the improved general health, not only oral health, of patients treated in the dental practice.

The guideline document is important because it focuses attention on the oral health of the increasing number of patients across the globe with diabetes. Dental disease is a component of the diabetes clinical spectrum. Additional studies appear in peer-reviewed journals each month. Thus, the findings regarding the bi-directional relationship of diabetes mellitus and oral health presented in this guideline document are not final.

Dr Carsten Appel
Germany

Endodontic therapy is often the last opportunity to preserve a natural tooth. If a tooth has a sufficient restorative and periodontal prognosis and the necessary endodontic treatment is done properly, the longevity of patients’ teeth can be extended to decades. There is ongoing debate comparing endodontics and implants as therapy alternatives. Yet, there seems to be a tendency towards the replacement of natural teeth with implants, sometimes even in cases when the tooth could have been preserved.

Research figures show that there is a significant difference between the high success rates of endodontic treatment and controlled studies and the incidence of apical periodontitis after endodontic treatment, as demonstrated in cross-sectional studies. This may be an indication of the difference between controlled treatment and what is achieved in reality, thereby explaining the endodontic treatment results we often see in our patients.

Controlled studies in implantology have mostly presented data indicating implant survival and not implant success, as demanded by Dale, Albrektsson and others. Even early implant loss, within the first weeks of placement, is often not included in many statistical calculations. In the last two years, reports have indicated instabilities of peri-implantitis at a rate of 10 per cent and in some implant types of up to 29 per cent. Some studies have shown higher incidences of peri-implantitis in patients that have lost teeth because of periodontitis before and therefore suggest a possible predisposition. Additionally, we are only beginning to understand the treatment of peri-implantitis.

In my opinion, implants are a very valuable instrument if the natural tooth has already been lost or is at risk of losing its diagnos- is. But if a tooth has a sufficient restorative, periodontal and endodontic prognosis, it should be preserved in most cases. Thus, I consider that the situation is not one of endodontics versus implants but one of two disciplines working alongside in the goal of best serving our patients.

Dr Carsten Appel is the President of the German Society for Endontology and guest editor for Root—The international magazine of endodontics. He can be contacted at mail@carstenappel.de.
WHO says women need better health care

Daniel Zimmermann

HONG KONG/LEIPZIG, Germany: The World Health Organization (WHO) has stressed the need to improve health care for women, especially those services pertaining to key stages of life, such as adolescence and older age. According to a new report by the organisation, lack of access to education, decision-making positions and income limit women’s ability to protect their own health and that of their families. Policy change and action is needed within the health sector and beyond to remove these barriers, WHO Director-General Dr Margaret Chan said.

According to Dr Chan, women provide between 80 and 90 per cent of health care worldwide, whether in the home or as nurses, but rarely receive the care they need themselves. For example, in many countries sexual and reproductive health services tend to focus exclusively on married women. Few services also cater for marginalised groups of women, such as sex workers, intravenous drug users, ethnic minorities and rural women.

Although considered to be ‘male problems’, heart attacks and strokes are two leading, global causes of death of women—who often exhibit different symptoms from men.

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Re: “Experts discuss future of implantology in Gothenburg” (Dental Tribune Asia Pacific No. 10, Vol. 7, page 1)

Fulfilling patient needs is the aim of my daily practice. Dental professionals would be better helped if they could have access to accurate information on the effectiveness of treatments found to have positive results, as reported in scientific papers. This means that opposing the commercial publishing of articles on treatments with non-positive results is surely the best and ethical approach, although not widespread. It’s odd that the person who promoted advertising of a surgical procedure is now blaming people for pursuing commercial interests.

Leopoldo Bozzi, Italy, 18 Nov. 2009

Re: “To treat health care not as a market commodity but as a public benefit institution.”

Obviously, the writer of this article knows nothing about economics. The demand for health care is infinite. Making things free through a government programme will bankrupt governments and inevitably lead to rationing. Health care, like any other service, involves labour of individuals and is therefore NOT a right—unlike freedoms of press, religion or speech, which require nothing other than people leave us alone. We don’t need lectures from Euro-socialists like the writer. Europe, with its practically non-existent growth rates and entitlement culture, is definitely NOT a model we wish to emulate!

Kim Henry, USA, 13 Nov. 2009

Re: Editorial, (Dental Tribune Asia Pacific No. 6, Vol. 7, page 4)

“...to treat health care not as a market commodity but as a public benefit institution.”

To the Editor

Re: “Experts discuss future of implantology in Gothenburg” (Dental Tribune Asia Pacific No. 10, Vol. 7, page 1)
US dental programme helps victims of domestic violence

Daniel Zimmermann

The American Academy of Cosmetic Dentistry Charitable Foundation (AACDCF) has announced that over 800 survivors of domestic violence have received free cosmetic dental care through the organisation’s Give Back A Smile programme. The results were released on this year’s Health Cares About Domestic Violence Day, which takes place annually on the second Wednesday of October.

“The AACDCF Give Back A Smile programme was founded in 2006 to help restore the lives of domestic abuse survivors by providing dental care at no cost. In addition, the organisation supports dental professionals who are interested in learning from experts the way to approach difficult situations in the dental practice in cases of suspected domestic violence.

Currently, there are 400 applicants being treated throughout the US. According to the US National Coalition Against Domestic Violence, more than five million people are affected by domestic violence each year. Almost 75 per cent of injuries are to the head and face, which means the dental office is in an extremely influential position to be able to intervene and help stop the violence.

“After suffering abuse, it is difficult for survivors to find something to smile about, and even more difficult when they don’t have a smile to show. AACDCF volunteers assist survivors of domestic violence by treating their dental injuries, restoring their smiles, self-esteem, and ultimately, their lives,” AACDCF Program Manager Lisa Fitch said.
Materials used in root canal procedures are not always compatible with each other or do not bond properly with the hard dental tissue. Root filling materials, for example, should not shrink as they harden and should be visible in X-rays. Materials used to rebuild the tooth should mimic the properties of the tooth itself.

Researchers at the Fraunhofer Institute for Silicate Research in Würzburg (Germany) have developed a new material that can be used for all components of root canal treatment. The material, which was developed in collaboration with researchers from VOCO GmbH, a German manufacturer of dental restorative materials, is based on ORMOCERs that are combined with various nano- and micro-particles. While standard materials shrink by 2 to 4 per cent, ORMOCERs only shrink by 1.3 per cent as they harden. They can also be adapted to adhere to the different parts of the tooth, the researchers said.

ORMOCERS are already used in optical functional coatings for glass and ceramic components and easy-to-clean coatings for metals and leather. According to ISC officials, a final product for dentistry will be launched in a few years.

The Greater New York Dental Meeting has elected Dr John R. Halikias as new chairman for the years 2010 and 2011. He will lead the organisation in its effort to continue the GNYDM’s mission of fostering lifelong learning for dental professionals and providing enormous sales opportunities for the dental industry, meeting officials told Dental Tribune America in New York.

Halikias will accept his honour after he was unanimously elected by the GNYDM Organization Committee.

Halikias has served the GNYDM for more than 25 years while also being president of the Second District Dental Society, one of the sponsors of the meeting. He learned his dental degree from the New York College of Dentistry in 1985. He is also a member of the American Dental Association, New York State Dental Association, American College of Dentistry and Hellenic Dental Society, and is a fellow of the Academy of General Dentistry. He currently practices general dentistry with his father, Dr Robert Halikias, in Brooklyn, NY.

As the largest dental convention, exposition and congress in the United States, the meeting continues to attract more than 57,000 attendees including 17,000 dentists from all US states and 118 countries.
In November, an agreement in concept was reached by a World Health Organization-convened international expert group meeting, supporting the phase-out of dental mercury use worldwide. Dental Tribune Group Editor Daniel Zimmermann spoke with Prof. Lars Hylander, Associate Professor at the University of Uppsala in Sweden who attended the meeting, about the agreement and strategies for future biomaterials use in dentistry.

Daniel Zimmermann: Prof. Hylander, you recently attended a joint meeting of the World Health Organization (WHO) and the United Nations Environment Programme (UNEP) that aimed to assess the latest clinical evidence on dental restorative materials. Could you tell us about the outcome of the meeting?

Prof. Lars Hylander: Most participants agreed that amalgam should be phased out or at least phased down. Dr Poul Erik Petersen, Responsible Officer for Oral Health at the WHO, however, raised several good questions, such as what to tell people in poor countries who cannot even afford dental amalgam fillings. At this point, the room grew rather silent. A similar consultation was held more than ten years ago. What has changed since then concerning the manner in which dental restorative materials are perceived?

Allergic reactions from amalgam fillings in some patients have been acknowledged by pro-amalgamists. Mercury leakages and emissions from dental amalgam into the environment have been fully acknowledged, particularly after dental amalgam was banned in Norway and Sweden, and restricted in Denmark and other places. Proof of methylmercury formation in wastewater from dental clinics is a third factor that makes the continued use of amalgam less justified. Another factor is that alternative tooth filling materials are now available or in development.

What has been decided regarding dental amalgam?

The WHO has not been as quick as Norway, who instituted a ban on dental amalgam in less than six months after the proposal of a ban was presented in the country. Thus far, nothing has been decided, but the WHO can hardly ignore the decision made by the world’s governments within the UNEP to negotiate a mercury treaty, which will begin in Stockholm next June. There was some consensus that mercury use in dentistry should be phased down. A suitable way to do this is to begin teaching alternative restoration techniques, other than dental amalgam, in dental schools.

There was a focus on the oral cavity, which thus ignored the environmental aspects such as mercury emissions from crematoria and leakage of mercury into wastewater from dental clinics and the wearing of amalgam surfaces due to everyday chewing. The American Dental Association demonstrated this most clearly in the presentation by Dr Daniel Meyer, in which it was stated that of the 35 tons of amalgam used annually in the US, only a few hundred kilograms are emitted into the environment.

Which restorative materials were considered to have the most potential for use in developed and developing countries?

Composites and other white filling materials have replaced amalgam in several developed nations. Even in countries with an amalgam ban, such as in Japan, less than 4 per cent of the fillings are now fabricated with amalgam, for aesthetic reasons. In addition, many patients do not find it sensible to have an element as mercury just a few centimetres from their brains.

Composites and glass ionomers are also widely used in many developing countries. The question of why such developments progress so slowly in the big nations of the rich world was raised. Atraumatic restorative treatment with glass ionomers and using only hand tools is a promising alternative, not only for developing countries. In countries in which glass ionomers or composites are produced locally, the cost of these fillings is lower than that of amalgam.

Thank you very much for the interview.
Dealing with stress in the 21st century—a perspective for the dental profession

Ros Edlin
United Kingdom

Ask the average man in the street for his opinion as to whether or not dentists experience stress, and your query will, in all probability, be met with a look of incredulity and a shrug of derision. After all, isn’t stress in the domain of the poor patient rather than the high-earning, fast-living, Porsche-driving dentist? A media-fuelled opinion such as this may be true for a minority of dentists, but for the majority this is an entirely inaccurate assessment of dentistry today.

What is true, however, is that dentists are one of the most stressed of the professional group. A recent study by HL Myers and LB Myers conducted using an anonymous cross-section of 2,441 UK GDPs, found that 60 per cent of GDPs reported being nervous, tense or depressed, 55.5 per cent were with a headache, 50 per cent reported difficulty sleeping and 48.2 per cent reported feeling tired for no apparent reason—all signs possibly related to work related stress.

So why are dentists so susceptible to stress? Not only are they required to work in an intricate manner in a sensitive and intimate part of the body, sitting in the same position for long periods of time, but they also have to be responsible for the smooth running of the practice with regard to both staff and patients, as well as managing the financial aspect. Added to this are the ever-increasing demands and expectations of patients and the constant awareness of running behind schedule. As if this wasn’t enough, they have to ensure that they maintain clinical excellence in the eyes of regulatory bodies. Faced with all these factors, and for the most part, not having received any particular training in, for example, people skills or financial management, it is little wonder that many dentists fall victim to stress—related illness, either mental, physical or financial.

Stress itself is not an illness but is, according to the Health and Safety Executive [HSE] definition, ‘the adverse reaction people have to excessive pressure or other types of demand placed upon them.’ The HSE also makes a ‘good’ reaction to stress onto productivity and performance in the workplace.

This is a rather perceptive remark.

The concept of perception is particularly relevant in that, faced with the same situation, a difficult procedure or a demanding patient, one dentist may relish the challenge and yet the other be trembling in their shoes! Also pertinent to the definition of stress are the notions of control and change. It is clear that we function best when we are in control of our circumstances, when we feel we are responsible for our successes or failures due to our own personal attributes. This could also include the responsibility of the welfare of both patients and staff. As is often the case however, bureaucracy mitigates against this feeling of control which could result in work-related stress. The recent NHS Dental Contract for the UK is a prime example where it can be argued that dentists have a loss of control of their own destinies. It also illustrates the importance of involvement in the process of change for the best results to be achieved. “Today’s dental environment is not going to change to accommodate the individual. It’s the individual who needs to learn to accommodate the environment if he or she does not want to pay the price of chronic stress.”

There is no doubt that we all need pressures and challenges in our lives to get us up in the morning and to keep us going. These can galvanise us into achieving great things, to work at our most productive level, but we have to be aware that having unrealistic goals or expectations can possibly result in the ‘law of diminishing returns’, i.e., the more we push ourselves to reach that elusive goal, the less well we can sometimes perform. This is not to undermine the thrill of achieve- ment, but it is worth paying heed to the warning signs. These warning signs are like traffic lights in our lives. Green means that everything (or nearly everything) is going well with us. We are enjoying our work, the practice is flourishing; we have a great team and the patients are appreciative. Home and social life is good; the children are behaving themselves and the sun is shining. Then perhaps things start to go slightly awry—your valued nurse leaves, creating extra work for the rest of the staff, and leaving you feeling is if you’ve lost your right arm. You find yourself staying later at the surgery to catch up and you are aware that you are losing concentration and feeling tired at usual. At the surgery you feel your concentration slipping slightly and you are becoming tense and irritable.

This situation may carry on for a while with perhaps other events occurring to add to the mix—a complaint or family illness for example. At home, your evening glass of wine is turning into two or three. You are sleeping badly, relationships are suffering and you are starting to feel that you can’t cope. The red light is beckoning! If the symptoms start to go to an extent of absolute exhaustion, ill health and the inability to cope, it could be advisable to seek help.

Personality can also have a bearing on the dentist’s ability to cope with stressful situations. A study carried out by Professor Cary Cooper et al suggested that dentists had a tendency to exhibit ‘Type A’ behaviour. People with ‘Type A’ personalities tend to be driven, highly ambitious, impa- tient, aggressive and intolerant. They have high expectations of themselves and those around them. “Type B” personalities although they may be equally ambitious and successful, are able to perform in a calmer and more relaxed manner. People can fluctuate between these two behaviours which are said to be on a continuum.

A successful practice is one where effective stress management strategies are firmly in place. This contributes to the all-embracing well-being and competence within the practice. The positive effect emanates throughout—the staff are valued and motivated and the patients feel more relaxed and welcome. A win win situation for all concerned. Achieving this ideal situation does not come naturally to many practitioners who may require guidance. It may be nec-
It is clear that we function best when we are in control of our circumstances.

In terms of individual stress, try take a step back and assess where the stress is coming from. Writing a list of causes from the most stressful down to the least will help you gain some perspective on the problem and may inspire you to tackle some of the issues raised. It is even possible that you could be the cause of the stress! You may need help in dealing with some of these issues. Try not to let pride stand in the way of getting the help you need.

For the individual, relaxation techniques are also recommended. Although it is often thought that relaxation is not compatible with working in a dental surgery, with organisation and planning it is feasible. (Some European countries manage successfully to incorporate this into their working day.) A prerequisite would have to be a competent receptionist who would not fill your appointment book so full that you do not have time to breathe, let alone try some deep breathing (which is excellent for calming you down). Take in a deep breath (don’t hold it) and count one, three as you exhale slowly.

In your every day life having a period of relaxation is vital. It could be as basic as taking breaks in the day or going out at lunchtime to listening to music or having a relaxing bath. The importance of relaxation is that it enables you to switch off and recharge your batteries!

Equally important is physical exercise. Exercise burns up the excess adrenaline resulting from stress, allowing the body to return to a steady state. It can also increase energy and efficiency. Do find an exercise which you enjoy that will motivate you to continue doing it.

Balance your diet. Eat breakfast, drink sensibly and include lots of water to rehydrate the system. Include complex carbohydrates (wholemeal bread, jacket potatoes) in your diet, to counteract mood swings, and fruit and vegetables to provide vitamin C to support the immune system.

Manage your time (and yourself) efficiently. Again, taking a step back and reviewing your working practice is essential. Do you have an allotted time for dealing with emergencies and administration? Are you constantly running behind schedule causing your stress levels to escalate? Developing leadership and organisational skills will enable you to feel more in control of your working environment.

Ensure that your staff are properly trained and aware of their individual roles and responsibilities. Encourage a culture of mutual support, whereby asking for help is not viewed as weakness. Talking problems with someone you trust can be such a help! As mentioned previously, some dentists may be excellent practitioners but sadly lacking in interpersonal skills. An ability to listen is a gift. If you feel you need some training in communication, there are plenty of courses available.

By incorporating at least some of these strategies into your everyday life and your working life, you could create an environment which is stress-free and an environment in which it is a pleasure to work. It could make the difference between a good practice and an outstanding one. Who wouldn’t want that?
Does dentine hypersensitivity affect oral health-related quality of life?

Dr Katrin Bekes

Dentine hypersensitivity is an oral complaint frequently reported in clinical dental practice. While many individuals do not seek treatment to desensitise their teeth because they do not perceive dentine hypersensitivity to be a severe oral health problem, a substantial number of patients experience discomfort to the extent that it interferes with their eating, drinking, oral hygiene habits and sometimes even breathing. These symptoms often have a considerably adverse impact on their daily quality of life (QoL). This article reviews the impairments of oral health-related quality of life in patients seeking care for dentine hypersensitivity.

Traditionally, dentists have been trained to recognise and treat oral diseases and to describe them by using dental indices. Dental indices provide a quantitative method for measuring, scoring, and analysing dental conditions in individual and groups. They describe the status of individuals or groups with respect to the condition being measured. However, important as these objective measures are, they only reflect the end-point of the disease processes. They give no indication of the impact of the disease process, especially oral disorders, on function or psychosocial well-being, and only provide little insight into the impact on daily living and QoL.

Therefore, QoL research in medicine and dentistry has attracted increasing attention over the past years. QoL is defined as an individual’s perception of his or her position in life, in the context of the culture and value systems in which he or she lives and in relation to his or her expectations, goals and concerns. QoL has multiple dimensions (such as cultural factors, social integration, socio-economic status, quality of environment and personal autonomy). One dimension of QoL is health. The real impact of health and disease on QoL is known as health-related quality of life (HRQoL). Oral health-related quality of life (OHQoL) is that part of HRQoL that focuses on oral health and orofacial concerns (Fig. 1). The concept of OHQoL facilitates studying the impact of a disease on a person’s total oral health because it can be used across conditions. It describes the way in which oral health affects a person’s ability to function, his or her psychological status, social factors and pain or discomfort.

How to measure OHQoL

OHQoL is a multidimensional construct that cannot be observed directly. It needs to be visualised by means of suitable indicators. In order to comprehend a construct like this, target persons, that is patients, have to be asked pertinent questions. For example, some questions focus on function, some are concerned with pain and discomfort, and others evaluate self-image and social interaction.

The Oral Health Impact Profile (OHIP) is amongst the most widely used instrument in studies evaluating OHQoL. It attempts to measure both the frequency and severity of oral problems on functional and psychosocial well being. This tool was developed by Slade and Spencer in Australia in 1994.

The OHIP is a 49-item measure, with statements grouped into seven theoretical domains, namely functional limitation, pain, psychological discomfort, physical disability, psychological disability, social disability and handicap. Examples of some OHIP questions are:

- Have you had trouble pronouncing words because of problems with your teeth, mouth or dentures?
- Have you found it uncomfortable to eat any foods because of problems with your teeth, mouth or dentures?
- Have you felt that your sense of taste has worsened because of problems with your teeth, mouth or dentures?

For each of the 49 OHIP questions, subjects are asked how frequently they have experienced the oral problem. Responses are according to a Likert-type scale: 0 = never, 1 = hardly ever, 2 = occasionally, 3 = fairly often, and 4 = very often.

A summary score of between 0 and 196 results from the 49 questions, with 5 scoring steps each, which provides a good impression of the extent to which OHQoL is affected. A score of 0 indicates the absence of any oral health-related problem. Higher scores represent an OHQoL that is more impaired. The most...
extensive impairment of the OHRQoL is expressed by a score of 106. This is termed the problem index and demonstrates that all oral problems are frequently encountered. A table of standard values represents the different population proportions is provided, according to which the patient’s score can be compared and evaluated.

To be able to assess levels of OHRQoL in non-English-speaking populations, cross-culturally adapted translations of the original English-language version of the OHIP into Chinese, Dutch, Hungarian, Italian, Japanese, Portuguese, Spanish and Swedish has been achieved in several countries. The demand for an internationally comparable German translation led to the development of a German version specifically. OHIP-G can be applied to patients of 16 years and older.

**OHRQoL in patients with dentine hypersensitivity**

Dentine hypersensitivity is a common oral complaint that is frequently reported in dental practice. It is characterised by a sharp and sharp pain arising from exposed dentine and occurring in the presence of thermal, chemical, tactile or osmotic stimuli (Fig. 2). From the relatively few studies that investigate the prevalence of dentine hypersensitivity, it can be concluded that it is a frequent condition. Studies have reported a prevalence of dentine hypersensitivity in the adult dentate population ranging from 41 to 57 per cent. However, figures as high as 60 to 98 per cent have been reported in patients with periodontitis.

While many individuals do not seek treatment to desensitise their teeth because they do not perceive dentine hypersensitivity to be a severe oral health problem, 10 to 25 per cent of patients in practice are discomforted to the extent that it interferes with their eating, drinking (including coffee and alcohol), oral hygiene habits and sometimes even breathing. The degree of discomfort depends on individual pain perception, pain tolerance, and emotional and physical factors. These symptoms are highly relevant from the patient’s point of view and often have a considerably adverse effect on daily QoL.

A study was conducted at the Martin Luther University Halle-Wittenberg, Germany, to describe and evaluate OHRQoL in patients with dentine hypersensitivity. Data was collected through a questionnaire as part of a larger study targeting patients with hypersensitive teeth who participated in the study, presenting at 161 German dental offices because of hypersensitive teeth and reporting positively to an air stimulus applied by the dentist. Patients with removable partial dentures and patients with missing answers in the OHIP questionnaire were excluded. After these exclusions, 656 patients remained in the study for analysis. These patients were compared with 1,541 subjects without removable partial dentures from a national, general German population sample (mean age: 57.7 ± 15.4 years). OHRQoL was assessed using OHIP-G. The differences in OHRQoL, measured with the OHIP questionnaire in patients with dentine hypersensitivity and in a general population sample, can be observed in adults of all ages. In this study, patients with sensitive teeth reported substantial OHRQoL impairments on patients’ perceived oral health status and OHRQoL is increasingly recognised as an important component of health. Dentine hypersensitivity is a frequent problem that can be observed in adults of all ages. In this study, patients with sensitive teeth reported substantial OHRQoL impairments on patients’ perceived oral health.

**“QoL has been established as an important outcome for evaluating the impact of a disease and for assessing the efficacy of treatment”**

The OHIP-G summary score characterised the OHIP-G construct as a whole. The OHIP-G summary score of patients with hypersensitive teeth was 54.5 (± 22.6), while the general population sample had a score of 12.2 (± 18.6). The 22.3 difference was statistically significant. The general population subjects had an OHIP-G median score of 5, while the patient group had an OHIP-G median score of 50 (Fig. 5). Ten per cent of the subjects with the highest OHIP-G summary scores had scores of 56 (general population) and 66 (patients).

Differences according to gender were statistically significant. Although the difference between gender of a mean 2.8 points was statistically significant (p < 0.01), it was regarded as negligible. Amongst the patient group, women reported more problems with the condition of dentine hypersensitivity than men, which is in contrast to the general population, in which men had higher OHIP scores than women (Fig. 4).

**Conclusions**

QoL has been established as an important outcome for evaluating the impact of a disease and for assessing the efficacy of treatment. The impact of oral disorders and interventions on patients’ perceived oral health status and OHRQoL is increasingly recognised as an important component of health. Dentine hypersensitivity is a frequent problem that can be observed in adults of all ages. In this study, patients with sensitive teeth reported substantial OHRQoL impairments on patients’ perceived oral health.

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**Instrument Disinfection**

- Combination of active substances...  
- Only one preparation for the disinfection of drills and instruments.

**Clinical data**

- Dr. H. Brill, Hamburg, VAH, EN, durability in use, 2006-08; 2008-10; 2009-06; 2009-07
- Prof. Dr. G. Fröbel, Münster, ultrasonic, 1999-2000
- IRM, F-Mitry-Mory; EN 1040 + EN 1275 + AFNOR T 72-300 + AFNOR NF T 72-170, 2003-09
- Dr. J. Steinmann, Bremen, virucidal against BVDV, 2003-11; Vaccinia, 2006-05; Polio (55°C), 2007-07
- E certified

**Combination of active substances**

- Ungicidal incl. A. niger
- Simplex, Influenza as non-enveloped virus, A. niger
- Osmotic stimuli (Fig. 2). From the relatively few studies that investigate the prevalence of dentine hypersensitivity, it can be concluded that it is a frequent condition. Studies have reported a prevalence of dentine hypersensitivity in the adult dentate population ranging from 41 to 57 per cent. However, figures as high as 60 to 98 per cent have been reported in patients with periodontitis. While many individuals do not seek treatment to desensitise their teeth because they do not perceive dentine hypersensitivity to be a severe oral health problem, 10 to 25 per cent of patients in practice are discomforted to the extent that it interferes with their eating, drinking (including coffee and alcohol), oral hygiene habits and sometimes even breathing. The degree of discomfort depends on individual pain perception, pain tolerance, and emotional and physical factors. These symptoms are highly relevant from the patient’s point of view and often have a considerably adverse effect on daily QoL.

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Jack of all trades, master of none

Peter Dunn

Misplaced demand seems to have created a society of ‘one-stop shops’. We can now buy insurance from supermarkets, candles from post offices and shoes from pharmacies. Where will it end—contact lenses from libraries? Everyone is familiar with the phrase ‘Jack of all trades, master of none’. Many companies that became experts in their field have now branched out into other areas as a way of appealing to a wider audience. They may well have boosted their profile and profits in the process, but by expanding in this way, they have watered down their skills and potentially the service that you receive.

Once upon a time dentistry was offered by pharmacies but it failed. Although one major supermarket in the UK has set up an in-store dental practice, the service has yet to be rolled out nationally. Sometimes convenience is beneficial. The facility to collect your prescription from the supermarket pharmacy is helpful but are generalists properly placed to assist you in choosing your ideal pension or investment portfolio and are you willing to chance it?

The convenience of the king so many boxers from one roof tempting and if your purpose is to find the most convenient route then your goal has been achieved. However, if your aim is to fulfill your needs in the most effective and successful way possible, a one-size fits all approach is hardly likely to give you the specific outcome that reflects your perfect fit.

A specialist company may offer an all-singing, all-dancing menu of services or boast a large office housing scores of employees but what it will have is a dedicated team of people who know their field inside out.

Take marketing for instance. Many dental professionals feel competent enough to write their own web copy, to create the text for their welcome packs and even to create their own logos, and build their own websites. Generally the outcome is anything but professional and actually undermines the often superb clinical skills and experience patients can expect when choosing to attend that practice. The perceived cost saving from a do-it-yourself approach becomes a massive lost opportunity when the marketing communications not only fail to generate the desired level of business but create negative associations that can take years to change.

It would be wrong to assume that because a financial planner, accountant or solicitor has a long list of letters after their name, that they are best suited to supporting your business. We were horrified recently to see a client’s NHS income shown as expenditure in the accounts rather than income generating a loss in that year. The facility to collect your prescription from the supermarket pharmacy is helpful but are generalists actually undermining the perception of the dental profession?

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The cost of convenience

A generalist financial services or accountancy practice will appear to offer the full gamut of services to all manner of trades and professions, but their package tends to be fairly off the shelf to cater for all these different markets. Sure the convenience of the king so many boxers from one roof tempting and if your purpose is to find the most convenient route then your goal has been achieved. However, if your aim is to fulfill your needs in the most effective and successful way possible, a one-size fits all approach is hardly likely to give you the specific outcome that reflects your perfect fit.

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Investing in specialists

The dictionary defines an investment as ‘to commit money to a particular use in order to earn a financial return’. That means there is a reasonable expectation that your investment in professional advice should result in an otherwise better outcome. Savvy dental professionals appreciate the worth of seeking specialist advice from experts who understand the intricacies specific to the dental industry and how this specialist knowledge can affect long-term decisions.

Specialists from financial planners, banks, accountants, insurance companies and solicitors, to business consultants, mentors, life coaches, marketing specialists and practice valuers, can offer the best terms and services specific to you and your needs. They understand your world—and its challenges.

Being outcome focused

The goal for most forward-thinking dental professionals is to be financially independent and for their families to be secure. The aim is to minimise tax liabilities, enjoy a strong capital base, good income and sufficient, quality time to enjoy the fruits of their labour.

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Ensure every aspect of your financial future is safer with expert advice from specialists who have an affinity with the dental profession.

Trends & Applications

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Contact Info

Peter Dunn is director and senior consultant for Heritage Financial Advisers, a team of UK-based independent financial planning specialists dedicated to the dental sector. He can be contacted at info@hfadvisers.co.uk.

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Dental lasers: A new tool for the treatment of periodontal and peri-implant infections

Dr Gerald Mettraux

Periodontal infections without proper treatment lead to the loss of teeth. The reason for periodontal infections is dental plaque. A central role in this process is given to black-pigmented gram-negative anaerobes, yet other factors such as smoking, immunodeficiency and diabetes can influence the formation and progression of plaque. The classical treatment of periodontitis is based on the use of mechanical energy, for which the goal is to eliminate the infection and stabilise the attachment.

When clinical studies in the 1970s identified the possibilities and long-term results of periodontal therapies, dental implants were still a new concept in dentistry. Antibiotics and regenerative technologies were part of classical periodontitis treatment. Until recently, this had not changed much. The limits of periodontal therapy were hardly discussed. The maintenance of periodontally involved teeth was limited but the call for fixed tooth replacements was growing. The time for the artificial root had come. The field of implantology was developing rapidly and soon rivalled periodontal therapy in the field of restorative dentistry.

After years of unquestioned success, however, it was back to business. Dental implants were suddenly developing infectious lesions similar to those that occurred with periodontitis, and were failing. At the end of the 1980s, new diagnostics such as mucositis and peri-implantitis based on disease patterns and retrospective studies found their way into clinical practice.

It did not take long to realise that the aetiological factors were the same as those responsible for periodontitis. Risk factors also corresponded. Moreover, studies were showing that periodontitis could facilitate the formation of a peri-implantitis. It all came back to the classical periodontal therapy.

After a long period of scientific silence, the analogy of the classical periodontal treatment was extended to infections that occurred with dental implants. In 2000, N.P. Lang developed the CIST principle (Cumulative Interceptive Supportive Therapy). Depending on the outcome of the clinical and radiological examination, the treatment combined mechanical treatment, local disinfection, systemic use of antibiotics and surgical incision. Although the principle was good, the outcome was not satisfactory.

The need for a new treatment principle was evident. Studies have shown that peri-implant infections occurred after five years in 15 per cent of all placed implants (Berglundh 2002). Only one single study in both types of oral infections remained insusceptible: the surface of an implant could not be mechanically treated and was considered as ‘sacred’. After all, the rough implant surface is responsible for the osseointegration. Therefore, the classical treatment of periodontal infections and its limits was not suitable for the treatment of peri-implant infections.

The following tissues play a major role in the treatment of periodontitis and peri-implant infections:

- Soft tissue: gingival, mucosa, epithelium, connective tissue;
- Hard tissue: enamel, dentine, cementum, bone, calculus, titaniun; and
- Enzymes/pigment tissue: bacteria, viruses, fungi.

These can be divided into three groups: water, hydroxyapatites and enzymes/pigment.

Classical treatment is predominantly based on mechanical energy utilised in the form of instruments that are more than 1,000 times larger than the infections they are meant to treat and cannot reach far sites and rough surfaces. The laser as a light source can overcome this limit of the classical periodontal treatment by reaching further, and is thus more able to achieve a bacteria-free rough surface. Laser light makes it possible to treat the three groups directly with different wavelengths. The size of the wave corresponds to the size of the bacteria.

The outcome of the CIST therapy can be significantly improved by dental lasers. If laser treatment and the principle of multiphase periodontal therapies are added, a new concept is at hand that synergistically includes all successful methods.

Table 1 lists the absorption of the three laser systems in all three elements, as well as their utilisable effects. All three systems provide a decontamination of the surface. The most important attributes of the laser systems regarding decontamination are given in Table 2.

These laser systems can be utilised in all stages of the CIST treatment protocol including debridement and decontamination. Er:YAG and antibacterial Photodynamic Therapy (PDT) can be used for closed treatment of the implant surface, as well as the Diode laser which has a good effect on black pigmented bacteria. In addition, CO2 laser and Er:YAG can be used for open treatment. Studies are currently underway that may show if the use of antibiotics and disinfectants is still necessary.

Table 1. Characteristics of the three laser systems.

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<th>CO2</th>
<th>Diode laser</th>
<th>Er:YAG</th>
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<tr>
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<td>Water</td>
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<td>Application</td>
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<td>Decontamination</td>
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The treatment of a peri-implantitis can be performed in the following phases:

**Initial phase**
- Hygiene instructions, mechanical debridement with carbon curettes, 3x30-sec treatment with diode laser or antibacterial PDT
- Retreatment after one week
- Another laser treatment after one week in case clinical parameters show improvement

**Surgical phase**
- Flap elevation, mechanical debridement of the surface; calculus removal with Er:YAG or ultra sound; decontamination of the surface with Er:YAG, CO₂ or diode lasers; augmentation; or reduction of the gingival tissue.

**Supportive treatment phase**
- Enrolment of the clinical and radiological parameters, hygiene instructions.
- Depending on the presence of infection go back to the phases mentioned above.

**Case 1**
The left X-ray in Figure 1 shows acute peri-implantitis on implant 24 with Pus, BOP, probing depth 10 mm. Therapy consisted of mechanical debridement, 5x50-second treatment per session with a diode laser; two times repeated within three weeks.

The patient took 5 x 500 mg Flagyl over the course of seven days. There was no incision of the tissue, since the infection could be eliminated after triple use of the diode laser.

**Case 2**
The pictures on the left of Figure 2 show peri-implantitis on implant 25 that has not responded to diode laser treatment. An excessive amount of cementum was detected and removed with a Cavitron, followed by decontamination of the surface with a CO₂ laser and augmentation of bone tissue.

**Case 5**
Figure 3 shows peri-implantitis in the maxillary front region. The lesion was extensive and did not respond very well to treatment with a diode laser. Therefore, the implant surface was surgically displayed. The CO₂ decontamination was followed by augmentation with Bio-Oss and Bio-Gide. The figure shows the implant incision, as well as two X-rays before and three years after treatment.

An important factor for a successful peri-implant treatment is the periodontal condition of the residual dentition.

Diode lasers do not only have a decontaminating effect but also show biostimulating effects that can be of benefit for the healing of peri-implant defects.

**Conclusion**
The laser systems presented in this article offer new possibilities that augment the classical treatment of periodontal and peri-implant infections. Treatment protocols should be discussed. By selecting the correct wavelength, the causes of periodontal and peri-implant inflammation can be treated more effectively with decontaminating laser systems in the closed pockets (Diode, antibacterial PDT, Er:YAG) and in open flaps (CO₂ laser, Er:YAG). The use of antibiotics can be reduced, owing to the decontaminating effect of the laser on tissues and surfaces.

The development of a new therapy for peri-implantitis offers new possibilities for periodontal treatment. Further studies are required to define the parameters for each working step in laser treatment.

**Contact Info**
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“Patients’ satisfaction towards functional reconstruction is very high”

An interview with Dr Bo Chen, Beijing University School of Stomatology

With increasing public awareness of the benefits of dental implants, an increasing number of patients are considering this treatment option. While current studies often focus on clinical aspects such as osseo-integration, patient responses to psychological and psychosocial changes are only infrequently addressed. Dental Tribune International Group Editor Daniel Zimmermann spoke with Dr Bo Chen from the Department of Oral Implantology (Beijing University School of Stomatology in China) about her latest study on patients’ attitudes following implant placement and subsequent restoration.

Daniel Zimmermann: Dr Bo, studies on patient satisfaction figures of patients who have had maxillofacial surgery with implants are very rare, even in well-developed dental markets like Europe or the US. What motivated your study in China?

Dr Bo Chen: Severe jaw-bone defects due to tumour resection present a major problem for functional restoration (mastication, swallowing and speech), which severely influences patients’ quality of life. Reconstruction of lost tissue in order to facilitate implant placement often means relatively complex maxillofacial surgeries accompanied by certain morbidities. Unlike Europe or the US, where patients suffering from head or neck tumours are mostly treated by ENT surgeons and plastic surgeons, oral and maxillofacial surgeons in China treat such tumours in addition to conducting the subsequent bone reconstruction. The sample of such patients at the Peking University School of Stomatology is quite large compared with what is available in the literature.

Thus, I decided upon investigating patient satisfaction of this kind of treatment series.

Oral defects and edentulism can have a significant impact on people’s lives. How do they generally affect the social status of people in China?

Oral defects and edentulism may lower body image significantly. People tend to limit their social activities and contact with their surroundings. They tend to be more depressed and frustrated, less tolerant of their family and friends.

What measures did you use for the study and how did you implement them?

Questionnaires in the form of a visual analogue scale (VAS) of patients’ treatment satisfaction were used in addition to OHIP-14 (Oral Health Impact Profile-14) in this retrospective study. Patients were invited to the clinic for these evaluations, which took 50 minutes on average. For those who could not come to the clinic, the evaluation was conducted by telephone.

In a nutshell, what was the outcome and what psychological and psychosocial changes following surgery did the patients report?

According to a number of studies on patients suffering from head or neck tumours, frequent problems regarding the patients’ OHIP were reported, especially within one year after tumour resection. The retrospective study indicated that patients were satisfied with the outcome of functional reconstruction with osseointegrated implants despite the morbidity of the surgery. Their OHIP score was not significantly different to that of a healthy population, which means that they did not have more frequently reported psychological or psychosocial problems. For the majority who did not undergo functional reconstruction, the high cost of implant treatment was their most significant concern.

What conclusions did you draw from these results?

The patients’ satisfaction of functional reconstruction is very high. Their quality of life has greatly improved as demonstrated by the OHIP score. For financial reasons, only about 10 per cent of the patients are undergoing functional reconstruction with implants thus far.

It is not easy to find figures on implant procedures in China. What is the estimated number of dentists placing implants and where are they located?

Indeed, it is quite difficult to find reliable figures. The estimated number of dentists placing implants on a regular basis in China may be around 500. Thus far, they are mostly located in university-affiliated dental hospitals in the large cities. Some, but not many, are in private practice.

Should implantology form part of the curriculum in dental schools?

Only a few dental schools have begun offering implantology in their curriculum within the last couple of years. In the long term, implantology should and will form part of the standard curriculum. However, we need qualified and well-trained dental professionals who would like to convey their knowledge to dental students in a responsible way.

Industry experts have forecasted a 30 per cent annual growth rate in the implant market in China. What prospects do you predict for the specialty from a clinical perspective?

The next decade will witness a boom in implant dentistry in China. There will be increasing demand for training and education in this field in order to guarantee standardised development. Owing to the shortage of competent clinicians, we foresee a critical period ahead of us. We certainly need to strengthen cooperation with any possible positive resources, including the industry, for training and educational programmes.

The Chinese Stomatological Association recently announced a new partnership with the International Congress of Oral Implantologists to promote implantology. Is there a need for more public awareness in the field? We are lagging far behind in this regard compared to Europe or the US.

Thank you very much for the interview.

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of crowding, poverty and sickness. Delhi domestic terminal was like any other European airport—all Jasper Conran-designed hotels, five-star cuisine, designer shops and even a place to grab a coffee and a chocolate muffin. It seems Delhi has changed incredibly since my last visit three years ago.

After a good evening meal (during which I choked over the wine list, as luxury items cost three times more than in London; yet everyday living costs less than one-third), I caught the red-eye flight from Delhi to Jabalpur in Madhya Pradesh state. Touching down in Jabalpur revealed a complete contrast. A solitary, simple, plain landscape. Jabalpur is just like many other small towns in India: low rise, an army presence and an air of extreme heat. A quick tour revealed two operating theatres, three beds in each, with waiting and recovery areas; three large, gleaming, industrial autoclaves; lecture room; stores; office; changing room; staff room; and finally the dental room, all wonderfully air-conditioned.

I was introduced to Zelim Lazarus, the charismatic CEO of Impact India. She explained that the Lifeline Express was here to provide free treatment for all, but it could only be successful with the support and cooperation of the local community. Local hospitals had been contacted many months prior to arrival, and teams of local orthopaedic, eye, cleft lip and ENT surgeons agreed to give freely of their time. The local Hitkarmi Dental College was also supporting the project. The Director Dr. Dhiranwani and his team would be assisting me for the duration of my visit.

Getting things moving
As only certain types of operations could be performed on the train, all patients had to be screened prior to commencement. The orthopaedic team alone saw more than 3,000 patients of which 200 were suitable cases! Lazarus explained that the only way to “get things moving” was to go straight to the ‘District Collector’. He is the area head of local government and in India holds a position of considerable power and influence. He agreed to mobilise his network of officials to ensure that all in the town and outlying villages would be aware of the visit. The Collector also wanted to meet ‘the dentist from London’, and so at the daily appointed hour he arrived for the inaugural ceremony of the dental suite. He assured me that he was committed to spreading the word and promised me many patients for the next day. To prove his point, he brought along the local television station to interview me with (which was aired that night!).

The following morning I was raring to go. I hadn’t been this excited about going to work for years. So at 9 am on the dot, I arrived at the platform ready, willing and able only to find the place virtually deserted. Lt Col Randhir Singh Vishwen (who runs the Lifeline Express) invited me into his office for a cup of tea. In the nicest possible way, he explained that in India when a doctor says he starts at 9 am he never arrives before 10!
As a result, patients never turn up before 10:15. The team from the dental college arrived at 9:50. I had thought they would send dental nurses to assist me, but to my surprise two dentists, Dr Mangesh Ghate and the newly qualified Dr Pratiba Patel, a hygienist, Amos; and our nurse, Reena, welcomed me. Dr Ghate explained that as it was my first day they wanted to ensure I was fully supported! He proposed that as it was likely to be very busy we concentrate on those most in need. Dr Patel and he would initially screen the patients and any non-urgent cases would be asked to return at a later date. Anyone else would be given a written prescription for treatment. This was of enormous assistance, as my Hindi is terrible and most patients spoke a local dialect (one of the 1,500 to 2,000 local dialects). Some of those I examined had difficulty in opening their mouths and on further investigation, I noticed clinical changes on the buccal mucosae consistent with chewing tobacco and betel nut. Many patients had never visited a dentist in their life. However, almost everyone had suffered considerable pain they had been in (probably for some years).

Dr Ghate later confirmed that they see many cases of Submucous Fibrosis at the dental clinic. I remained for the next two days, after which it was time to hand over to Dr Ghate and his team who would continue the service for three weeks.

Staggering

By the end of my two days, we had seen and treated 62 patients for dental problems, a number that rose to an impressive 554 at the end of the three-week clinic. The medical teams on the Lifeline Express also treated 405 patients with eye problems, more than 100 for cleft lips, 85 patients with ear problems, and 211 sufferers of polio; in total a staggering 1,354 patients were treated.

Impact India’s ultimate aim is to raise awareness in communities of the medical benefits available to them, by encouraging them to demand treatment at local and regional health centres. Most poor Indians are illiterate and unaware of their right to treatment. For instance, in Madhya Pradesh those below the poverty line are entitled to £500 (US$850) in treatment a year, paid for by the state. While funds are available to treat those below the poverty line, less than 10 per cent of the allocated funds reach those in need.

On my final day, I asked Lazarus what her ultimate dream for the Lifeline Express would be. “Neil, I hope that one day the train becomes definitive. If we can educate and inform people of their rights, treatment will be fully provided locally and our train will be surplus to requirements”.

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