IDEM 2020 succeeds as online event

Diverse online learning opportunities and virtual exhibition drew over 3,600 visitors.

By Dental Tribune International

SINGAPORE: For the first time, the International Dental Exhibition and Meeting (IDEM) was conducted online. The event, which was organised for the dental community by Koelnmesse and the Singapore Dental Association, was held from 19 June to 19 August 2020.

According to the organisers, 3,615 attendees from 54 countries and 904 exhibitors from 36 countries participated over a period of two months in the first edition of the event to be held online. The conference featured a mix of 27 conference sessions, both live and pre-recorded, conducted by 28 local and international speakers. The online conference covered a wide array of topics, which provided something for every dental practitioner. The digital event also featured several networking activities for all attendees, including three networking nights, a leaderboard competition and an online business matching programme.

As for the virtual exhibition part of the event, Koelnmesse reported that 80% of the companies who showcased their products expressed that they are likely to recommend IDEM to their colleagues and friends and are likely to return to another event organised by Koelnmesse and the Singapore Dental Association. A total of 6,658 booth views in the digital exhibition hall were generated during the period.

Fiona Yeo, who works in the marketing department of 3M Singapore, said: “IDEM 2020 has enabled 3M to gain an additional customer touchpoint during this time where the whole dental community is navigating through the recovery. Thank you IDEM for providing us a platform to continue educating and sharing our latest solutions alongside other industry counterparts.”

Numbers show that event attendees were as happy as the companies were about IDEM 2020. A total of 96% said that they would recommend the event to their friends and colleagues, and 83% are planning to return to the next edition, which will take place in two years’ time. Also, attendees showed satisfaction with regard to the educational programme. Attendee Dr Shirlyn Ong said: “The digital platform has enabled me to enjoy the sessions in my own time and at my own pace, allowing me to strike a great balance between work and family.”

“It was an extraordinary year for everyone, and we would like to extend our heartfelt gratitude to all who have participated and supported us in making IDEM’s debut as a fully digital event in just eight weeks,” the event organisers said.

IDEM is scheduled to return to its established physical format from 8 to 10 April 2022 at a new venue, the Sands Expo and Convention Centre at Marina Bay Sands in Singapore.

Paradigm shift in dentistry

Dr Pallavi Patil on practicing during the pandemic.

By Monique Mehler, Dental Tribune International

At this point during the COVID-19 pandemic, many dental offices have begun to adapt to the current situation and resumed their day-to-day work. However, there are many open questions in terms of this paradigm shift that relate to such topics as infection control, sterilisation monitoring and provision of emergency care. At IDEM 2020, Dr Pallavi Patil from India presented an online lecture on the importance of choosing the right protection and on overall transitions in dentistry during the pandemic. In an interview with Dental Tribune International, Dr Patil shared her expert opinion on the topic.

Dr Patil, dental professionals are at great risk of exposure to SARS-CoV-2 and, therefore, require proper protection. In your presentation, titled “Paradigm shift—dental practice in the pandemic”, you covered various tips and guidelines. Can you tell us a little bit more about this?

In this topic, I covered the essential infection prevention protocols and guidelines laid out by global governing bodies like the World Health Organization and the Centre for Disease Control and Prevention. These include personal protective equipment, masks, respirators, hand hygiene and device reprocessing and monitoring. The back-to-work guidebook especially gives very specific suggestions on every aspect of how to start a practice again after this hiatus.

What are the infection controls, administrative controls, environmental and facility controls to be laid down before, during and after treatment are covered? To this, I have also added some protocol changes with respect to routine clinical dental work, considering the additional requirements. The topic revolves around the four specifics: how to mitigate aerosol production, how to mitigate product contamination, how to reduce cross-contamination and how to reduce chairside procedure time.

What was the feedback you received from other dental professionals about your lecture?

Unanimous feedback indicated that the topic and related discussion had been needed. >> Page 02
There are many webinars and articles on standard precautions and transmission-based precautions. But what does one do once you have put all the precautionary measures in place? How do you start the treatment? What are changes in protocol that you need to make with SARS-CoV-2? How do you assess the validity of your actions?

While most of us have deferred elective procedures to a later date, no one knows when that will be. Just empirical treatment may not be enough sometimes. We need to know what the exact changes are, that we need, in order to make sure that we follow infection prevention protocols completely but without compromising on the final treatment outcome. We want to continue doing quality work, so we need to adapt to the new rules of the same game which we have been playing for a long time now.

You have been very active in conducting site workshops and lectures at conferences and institutions. How did you experience learning online for IDEM 2020?

As with every other country, the dental industry in India too. No matter which part of world you are in, there’s no one who isn’t affected by this crisis. India is a highly populated country. In accordance with the seriousness of the rapid spread of SARS-CoV-2, India was under complete lockdown from mid-March to mid-July. Too many unknown factors were involved, leading to panic and fear.

Researchers assess effects of oral care on prolonged viral shedding in COVID-19 patients.

By Jeremy Booth, Dental Tribune International

TOKYO, Japan: A study conducted at a hospital in Tokyo has found that poor oral hygiene could lead to prolonged viral shedding in patients with COVID-19.

It was observed that patients with inadequate oral health regimens returned positive results in polymerase chain reaction (PCR) tests for the virus long after their clinical recovery, leading the researchers to believe that oral hygiene could affect the accuracy of testing for the virus.

The researchers evaluated the course of treatment of eight COVID-19 patients who were admitted to the Department of Neurology at Tokyo Metropolitan Neurological Hospital between 30 April and 14 May. The patients had passed the acute phase of the disease, but were admitted to the dedicated medical facility for infectious diseases owing to persistently positive PCR test results for SARS-CoV-2.

The study found that, among the patients, the viral shedding period—the period during which the virus was still detectable after clinical recovery—ranged from one to 40 days. The average viral shedding period was found to be 41.1 days, but for two patients, Patient 1 and Patient 2, it continued for 53.0 days and 44.0 days, respectively. For Patients 3–8, two consecutive negative PCR test results were confirmed within 18 days of clinical recovery.

The researchers sought to establish why Patients 1 and 2 continued to test positive for the extended period. They noted that Patients 1–8 had kept up their personal hygiene routines, which included regular toothbrushing, while hospitalised in isolation in private rooms in the hospital. Patients 1 and 2, however, who had mental and/or psychiatric disorders, had not voluntarily brushed their teeth while hospitalised. After being instructed by the researchers to practise regular toothbrushing and gargling, the PCR tests of Patients 1 and 2 returned a negative result within four to nine days.

"Patient 1 had schizophrenia and was unable to voluntarily keep herself clean during isolated hospitalised life,” the study reads. “She brushed her teeth for the first time on the 38th day of hospitalisation, but after that, she did not brush her teeth at all. Her virus shedding period reached 46 days, with consistently positive PCR test results. We speculated that her inappropriate oral care might have caused the persistence of PCR test positivity. In collaboration with the medical facility, we encouraged Patient 1 to brush her teeth and gargle. Two days after the start of this instruction, on the 49th day after the patient’s onset of symptoms, the patient’s PCR test result was negative for the first time.”

Patient 2, who had the underlying diseases of dissociative disorders and mild mental retardation, returned a negative PCR test result 26 days after being admitted to the medical facility. However, the viral shedding period reached 43 days before two consecutive negative PCR test results could be obtained. “At that time, we found that Patient 2 rarely brushed her teeth. Since then, we repeatedly instructed her to brush her teeth. With four days of intensive toothbrushing with only water, Patient 2 had two consecutive negative PCR test results on Days 44 and 47, so she was discharged,” the researchers wrote.

They acknowledged that the low number of patients who were followed in the study made it difficult to draw statistical conclusions from the research, but noted that it was significant that the two patients with poor oral health regimes had displayed significantly longer than average viral shedding periods. “In such prolonged viral shedding cases, non-infectious viral nucleic acid may accumulate in an uncleaned oral cavity and may continue to be detected by PCR. We propose toothbrushing and gargling to remove accumulated non-infectious viral nucleic acid, leading to consistently negative PCR test results and thus avoiding unnecessarily long hospital stays,” the researchers concluded.

The study, titled “Effects of oral care on prolonged viral shedding in coronavirus disease 2019 (COVID-19),” was published online on 24 July 2020 in Special Care in Dentistry, ahead of inclusion in an issue.
Is Your Office Thera Yet?

Learn about the many benefits of the TheraFamily.
The science of restorative dentistry

Groundbreaking calcium-releasing technology opens a new door for expanding the THERA family of products.

BISCO is no stranger to developing groundbreaking materials. So, after witnessing the success of Mineral Trioxide Aggregate (MTA) as a revolutionary endodontic material when it came to perforation repairs, apexifications, pulpotomies, and pulp capping, the company’s research and development team looked to the lab in an effort to apply the same science to restorative dentistry.

The result was TheraCal LC. This resin-modified calcium silicate pulp protectant and liner signaled the use of a new resin and filler technology. Behind the scenes of TheraCal LC’s success and growing popularity among clinicians is a unique hydrophilic resin that allows calcium ions to be exchanged between the matrix and dentin structure—encouraging hydroxyapatite formation and a secondary dentin bridge.1,2

“I like TheraCal LC because it is light-cured, sets up very hard, induces secondary dentin formation, and allows me to etch and rinse cavosurfaces without fear of washing it out,” said Dr Darrell Lyvers. “It also helps minimise post-op sensitivity in deep cavities where irreversible pulptis would otherwise be sequelia.”

Dr Peifer also appreciates that TheraCal LC is calcium-releasing* with an alkaline pH, which promotes healing and apatite formation2,4 while insulating the pulp.1,5 “This product gives me peace of mind when I have a deep cavity preparation,” he shared.

Opening new doors

The breakthrough success of TheraCal LC and its unique hydrophilic resin and filler technology led BISCO to dig even deeper into the science of restorative dentistry and, in the process, solve even more clinical challenges.

“This new filler technology opened up a new door for product development,” shared Dr Rolando Nuñez, Clinical Research Manager at BISCO. “Now it has become possible to develop materials that contain calcium and fluoride, which can be released via an ion exchange.”

TheraCem, the second member of a growing THERA family, is a unique self-adhesive resin cement that not only bonds to dentin and various substrates—including zirconia, metal, and composite—without etching or priming, it also releases calcium and fluoride. After 30 minutes of polymerisation, it transitions from an acidic pH, which is needed for an initial bond, to a preferred alkaline pH.6

“I like TheraCem better than other cement products because of its ease of use, release of calcium and fluoride, and easy cleanup,” said Frisco, TX, clinician Dr Robert Beatty, adding that TheraCem allows him to cement crowns with a simplified procedure while being confident he’s creating a great seal.

A Growing Family

The THERA family recently added pulpotomy treatment to its list of indications with the release of TheraCal PT—a dual-cured resin-modified calcium silicate. After partial or full removal of the coronal pulp, it’s used to treat exposed dentin and create a protective barrier around the pulp complex.

TheraCal PT is chemically formulated with synthetic Portland cement silicate particles in a calcium-releasing hydrophilic matrix. It offers immediate placement directly into the pulp chamber, followed by a 10-second light-cure.

The THERA family of products continues to expand, with more products currently in development that are poised to protect the remaining dental structure.

“These new materials—whether they are intended to be used as pulp capping agents, liners, bases, or cements—will have an impact on the clinical approach of restorative dentistry and our patients,” said Dr Nuñez. “The age of drill and fill is over.”

BISCO’s search for new materials that are more compatible with tooth structure is far from over. And in the process of this ongoing research and development, the search will undoubtedly unearth new science and technology—leading to groundbreaking products that simplify life in the operator for clinicians everywhere.

“BISCO has some smart people working in their kitchens,” said Dr Peifer. “I have been wowed by every BISCO product that I have used.”

Support documents available at www.bisco.com

5 UNIQUE BENEFITS OF USING THERACAL LC

1. Unique hydrophilic matrix facilitates calcium release*
2. Alkaline pH promotes healing and apatite formation2,4
3. Syringe delivery allows for simple and precise placement—even in small areas
4. High radiopacity allows for easy identification and differentiation from recurrent decay and other restorative materials—which leads to faster diagnoses
5. Moisture tolerance results in low water solubility*

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Footnotes:

*Data on file. BISCO, Inc.
IDS to be hybrid event in 2021
German Dental Industry Association announces new digital tools for next year.

By Dental Tribune International

COLOGNE, Germany: About six months prior to the event, the organisers of the International Dental Show (IDS) have announced that they will be implementing several digital elements for the 39th edition of IDS, which will be held next year. In light of the travel restrictions in place, they aim to facilitate access to the global trade fair for visitors from abroad who will not be able to attend. The organisers of IDS have set up a hybrid IDS task force to implement a number of digital tools for the 2021 event. (Image: metamorworks/Shutterstock)

The digital IDS platform will provide information on new products, live streaming of webinars, press conferences and events, as well as one-to-one communications.

Over the past months, Koelnmesse, which stages IDS, has developed and taken measures for the digitalisation of trade fairs into hybrid events. "We want to implement these digital tools that were developed over the past weeks for our gamescom and DM-EXCO formats in a targeted manner for IDS 2021, in order to be able to offer the exhibitors and visitors manifold participation options beyond the physical event in Cologne," stated Oliver Frese, chief operating officer of Koelnmesse.

Mark Stephen Pace, chairman of the board of the Association of the German Dental Industry (VDDI), added: "The leading global trade fair, IDS, is writing a new chapter in its almost 100-year history. It has continually depicted the current developments of the dental market and its players over the past decades and supported the users with innovations. It is now time to further develop IDS in a new era. The technological innovations especially of the past years are opening up a new level of communications with our customers as well as the whole dental industry, which is already very digital-savvy in the production and application areas."

In 2019, IDS drew over 160,000 visitors from 166 countries and more than 2,300 companies from 64 countries exhibited at the show. According to the latest figures available from the VDDI, about 1,300 companies have applied to exhibit at IDS 2021.
Dental researcher is developing more aesthetic crowns for children

More aesthetically pleasing and more cost-effective alternatives to metal crowns.

By Brendan Day, Dental Tribune International

DUNEDIN, New Zealand: In New Zealand, one of most common methods for treating dental caries in primary teeth is the Hall technique. The non-invasive method involves placing metal crowns over teeth that are only moderately decayed, and is relatively quick and inexpensive to perform. Numerous issues have been reported with the type of crown used in Kiwi dental practices, however, leading a local dental researcher to begin developing her own restorative technology.

Dr Joanne Choi, a lecturer at the University of Otago’s Faculty of Dentistry and a dental technology and materials researcher, told Dental Tribune International (DTI) that her research into the topic “began almost by chance” in 2017, when her colleague Dr Lyn-die Foster Page conducted a presentation on the implementation of the Hall technique in New Zealand.

“She mentioned how parents had said that the metal Hall crowns don’t look nice,” Choi said.

To identify where you can best support each other’s practices and work hard towards achieving these goals with the aim of improving patient outcomes.

To make this collaborative approach a reality, there is also a need for growing partnerships and collaborations between national professional dental and pharmacy organisations. These partnerships could support the development and implementation of mutually appropriate pharmacy practice guidelines, decision support pathways and interprofessional education resources.

Is your model specific to Australia and its approach to oral health? Is it influenced, for example, by the fact that only 53% of Australians possess dental coverage?

Currently, there are no established oral healthcare models within Australian community pharmacies.

What is needed is the development and evaluation of innovative and collaborative pharmacy-based models to address poor oral health in rural and metropolitan regions. We need to show evidence that implementation of any proposed model is feasible, effective and mutually acceptable by both professions. I am working with Australian dentists, university dental schools and government health departments in order to obtain funding for the development and testing of collaborative oral healthcare models.
“If the kids have one or two metal crowns, it’s not such a problem, but if they have three or four, it becomes noticeable. This got me interested in starting a project to develop tooth-coloured crowns for New Zealand children.”

These metal crowns may draw unwanted attention to a child’s caries and add to any pre-existing dental anxiety, Choi said to DTI. Furthermore, she said that, although the crowns come in a number of different sizes, Maori and Pacific Islander children often have teeth that are larger than any of the available crowns.

In a press release from the University of Otago, Choi mentioned that the crowns she and her team are currently developing would be both more aesthetically pleasing and more cost-effective than the metal crowns currently used in local public dental health services.

In a press release from the University of Otago, Choi mentioned that the crowns she and her team are currently developing would be both more aesthetically pleasing and more cost-effective than the metal crowns currently used in local public dental health services.

According to Choi, a prototype of the tooth-coloured crown should be available and ready for clinical testing by the end of next year.

COVID-19 slows project, but only briefly

Choi told DTI that the COVID-19 pandemic had briefly delayed aspects of the project and had made securing funding more difficult. However, New Zealand’s relatively good ability to control the spread of SARS-CoV-2 has allowed her team to get back on schedule since, and a recent grant from the Cure Kids foundation—a charity that invests in medical research aimed at improving the lives of children—has ensured that they have sufficient funding.
COVID-19 and the potential for dental reform

An interview with Professor Richards Watt, University College London.

By Brendan Day, Dental Tribune International

Though the spread of SARS-CoV-2 has had an undeniably deleterious effect on many elements of the dental world, it has also opened up new possibilities for imagining how dentistry should be delivered. That is the contention of Dr Richard Watt, professor of dental public health in the Department of Epidemiology and Public Health at University College London, in a recent letter to The Lancet. Watt spoke with Dental Tribune International about how points of emphasis in dentistry may change in a post-pandemic world.

Prof. Watt, could you please explain how the current pandemic has helped to highlight opportunities for reform in dentistry?

The COVID-19 pandemic has highlighted some of the underlying problems that dentistry is facing globally. As many of us are aware, dentistry is recovering slowly, and in different countries, various issues have cropped up, but there are some common agendas that we really need to begin to tackle. One of these issues is the lack of an emphasis on prevention in dentistry, either delivered within clinical settings or across community and public health areas. This was one of the main points I was trying to get across in my letter.

What kinds of steps can, or should, be taken to implement these reforms?

I think the first thing to stress when dealing with such issues is that it’s not just simple reform; it’s not a straightforward issue. For many, many years, the dental profession has recognised that prevention is important, and changes have been made in some countries to address this. Largely, however, dentistry remains a treatment-centred service, and that approach is something that needs system-level reform. It’s not about the individual dental practitioner or the dental team, but instead it is the system of the delivery of dentistry that needs to change. System reform requires discussions to take place at the local and national level between practitioners, policymakers and funding agencies in order to figure out how prevention can be strengthened in the dental practice, as there’s no one system that fits all circumstances.

To be fair, these are big issues that don’t have any quick, easy answers. But I think it’s important that, as a profession, we debate and discuss these bigger issues because, at a time of crisis, there is an opportunity for us to really think through what the future holds.

Do you think that the fact that SARS-CoV-2 has affected everyone’s lives, not just those who suffer from oral health inequalities, will have an impact on the potential for reform in an area like dentistry?

In broader discussions taking place in the media, in academia, and so on, almost all sectors are taking stock of where they are and what this pandemic has meant to them. And overall, there seems to be a shared view that we don’t necessarily want to go back to how things were pre-COVID-19, not least of all because certain things are unlikely to ever be re-established.

In a lot of countries—certainly across Europe—the pandemic has disrupted daily life for many, but it has, however, had the most effect on those populations that are the most vulnerable and disadvantaged. This was already a problem, but we know that there are already increased unemployment numbers. If people are unemployed, they’re unlikely to go to the dentist to get new crowns, bridgework or other forms of expensive treatment. So the effects on dentistry, and the wider dental industry, are potentially massive.

It is hard to know at this stage how much of an economic bounce-back there will be and how long that will take. If we were working in the dental industry, I would be looking at trying to diversify and identify opportunities that are beyond what has been done historically in terms of promotional materials and equipment.

“The pandemic has [...] had the most effect on those populations that are the most vulnerable and disadvantaged”

To be fair, these are big issues that don’t have any quick, easy answers. But I think it’s important that, as a profession, we debate and discuss these bigger issues because, at a time of crisis, there is an opportunity for us to really think through what the future holds.

Many major dental companies have experienced massive losses throughout this pandemic. Do you think this could have an impact on the provision of dental services and will this potential impact be positive or negative?

I think that’s an important point. I think very few people are very confident in their predictions of how the pandemic is going to pan out economically, but we know that there are already increased unemployment numbers. If people are unemployed, they’re unlikely to go to the dentist to get new crowns, bridgework or other forms of expensive treatment. So the effects on dentistry, and the wider dental industry, are potentially massive.