Shifting the paradigm to prevention at home

Imagine that, in a world that knows the causes of paralysis, a major effort would still be expended in developing the perfect wheelchair instead of addressing the causes. In a world where patients strive for the healthiest smile, the dental profession still focuses on designing the perfect implant. How does one return to the basics of prophylaxis in dentistry? Success in prophylaxis can only be accomplished if practitioners teach and motivate themselves, their teams, their families and their patients about it. That is the vision of the iTOP programme, short for individually trained oral prophylaxis. This programme and concept have convinced thousands of dentists globally to rethink biofilm management, prophylaxis and oral health. How does iTOP work?

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Cologne, Germany, 20 °C on an early spring day: the International Dental Show (IDS), the world’s largest trade fair for dental professionals, is in full swing. Over 2,300 exhibitors, more than 155,000 trade visitors and five show days hardly leave time for toothbrushing. Hall 11.3 is the location of a vast variety of oral hygiene manufacturers. A large line is forming at the stand of a well-known brand for electric toothbrushes. Young women, most of them dental students or dental hygienists, queue to get the latest piece of perfect brushing equipment—free for everyone willing to wait. Upon arriving at the entrance, they fill out a form, watch a 10-minute presentation and receive the complete package, handed to them by a lovely hostess who just attended a car or food show, but considers this dental fair just as “fun and exciting”.

At a corner of Hall 11.3, visitors come upon the Curaden booth, temporary home to the Swiss oral health care manufacturer many dental professionals are familiar with because of its colourful CS 5460 toothbrushes. Passing by a range of interdental brushes, toothbrushes and toothpastes, attendees are keen to receive yet another fun and exciting bag packed with free cleaning tools. They approach the counter where a Curaden employee smiles and responds: “All you have to do is to queue up—and have your teeth brushed.” “Have my teeth brushed? I am a professional, I know how to brush my teeth,” is one of the politer answers. A few seconds later, the same professionals, albeit reluctantly, listen to dental hygienists or dentists introducing them to the comprehensive concept of iTOP. And that is where the magic starts!

After a few words about the philosophy and technique, Anna, one of the instructors, suddenly places a toothbrush into a young man’s mouth and starts brushing, only to ask him to brush her teeth a few seconds later. “I felt that you applied a bit too much pressure,” says Anna. “With this soft toothbrush, you only need to touch your gums with some of the bristles. Let me show it to you again.” They both spit out the toothpaste at the dental care station, repeat the brushing one more time—and the young man starts smiling. One short explanation, a single minute and the proper technique were enough to change his behaviour and future communication with the patient. He was introduced to the principle of Touch2Teach, which asserts that, in order to teach something to your patient, you have to start with improving your own brushing. Having clear criteria, concepts and techniques is important if you are to transfer that knowledge to patients.

A global concept

Touch2Teach is the unique practical part of the iTOP approach, which differs in many ways from other prophylaxis concepts. In most seminars, instructors often demonstrate something with participants looking over their shoulder. The comprehensive iTOP concept combines four aspects: regular training, the right techniques and tools, and the necessary motivation to instruct dental professionals, who can then transfer their new experience directly to their patients. All iTOP seminars are led by independent dentists and dental hygienists who have completed the training themselves. The
Visitors to IDS 2017 at the Curaden booth: iTOP provides dental professionals with the skills to speak in simple, interesting and effective language about oral hygiene. This fun and engaging language helps with repeating the same messages every time.
programme facilitates individual training with regular check-ups and corrections to the prophylactic techniques learnt. While iTOP started as a one-day training programme with 15 people in 2006, it now boasts 200 courses in 44 countries with 15,000 participants.

Yes, 15,000 general practitioners, periodontists, oral surgeons or dental hygienists who relearn for up to five days how to manage optimal oral health for their patients. The theoretical part includes an introduction to biofilm management, patient motivation, cleaning techniques and tools. Today, the courses range from introductory to advanced and teacher levels. The higher the level, the smaller the group will be. A yearly recall course ensures the maintenance of one’s individual skills and own oral health, just as at least twice-yearly recalls should occur in the dental practice. In all courses, a great deal of time is spent on the exchange of ideas and discussions surrounding the most effective, atraumatic and acceptable prophylaxis possible for patients. Ideas, theories and practical concepts from all over the world have been collected to advance the patient experience, another unique feature of the educational programme.

The iTOP philosophy envisions a world of motivated and educated patients and professionals, both of whom understand the need to use soft toothbrushes and interdental brushes daily. How can a dental professional get started then?

Change requires motivation
Essentially, iTOP starts with changing the dental professional, helping him or her see the patient’s perspective. Let us take interdental cleaning as an example. The dental office experiences two major problems with interdental cleaning every day: patient ability and motivation. An individual’s ability to clean interdentally can be taught easily. An interdental brush that is sized correctly for each interdental space is easy to handle and atraumatic, but effective and acceptable. The iTOP programme follows this principle: participants first learn the theory and then determine the accessibility and widths of their own interdental spaces. They identify the largest diameter that can pass between the teeth without causing discomfort or trauma. Once they have been equipped with a cleaning tool that is effective, atraumatic and acceptable, they can pass this knowledge on to their patients through a mandatory routine examination of each interdental site.

Establishing a patient’s ability is one part of a routine examination. Improving a patient’s motivation, however, is not as easy to achieve. Damage to the interdental papilla and abrasive trauma to the dental surface essentially result from a lack of motivation and training. Furthermore, bleeding may stop patients from using interdental brushes even though this bleeding will stop after several uses. At the same time, every dental professional knows that oral and periodontal diseases largely result from a lack of motivation to brush twice daily. All iTOP seminars devote a major part to individual instruction and motivation. By correcting and repeating the correct cleaning techniques as much as possible, everyone can achieve oral health for a lifetime.

However, the road to lifelong oral health requires change. Change requires motivation. And motivation requires repetition of education and training. The conclusion: lifelong oral health without education is impossible. So, who will be willing to lead this change?

Prevent, not repair what could have been prevented
Prague, Czech Republic, 20 °C on a late spring day: the second theoretical part of the iTOP for students seminar has just ended. Every six months, students and recent graduates of dental schools are invited to attend an exciting weekend in the Czech capital of Prague. They learn more about cleaning techniques, motivation and ways to implement the preventative mindset in their future practice. And, yes, they have a few beers because this is what the Czech Republic is also famous for. We sit at the table with the head instructor and father of iTOP, a true pioneer in prophylaxis. Born in 1946 in Prague, Dr Jiri Sedelmayer speaks in a calm, yet vibrant, voice recalling the tales of old your grandfather told. Last year, he celebrated 30 years as a dentist, an occasion on which he could not resist a glass of wine and a few cigarettes. In a world of perfect smiles, every dentist continues to be human. In a world of constant change, human beings remain creatures of habit.

Sedelmayer has spent most of his professional career repairing teeth. When he started working at the emergency room at the University of Hamburg in the 1980s, he realised that something was wrong. Every night, Sedelmayer witnessed so much suffering, severe periodontal disease and caries among educated businessmen, some of them crying from pain. Those businessmen expected Sedelmayer to fix what could have been prevented in the first place. “Most of the time, the only reason for this pain was a lack of mechanical plaque control. Hundreds of people that I treated simply did not brush their teeth properly. It was not taught to them—and it was not taught to me when I was studying.” About 30 years ago, ten of his peers would have shown him ten different Bass techniques. Most of these colleagues also started to bleed as soon Sedelmayer applied a new instrument called an interdental brush. Within two weeks, the inflammation had stopped and so had the bleeding. They were thankful for his advice—only to discover the rising potential of titanium implant systems and computer applications for the treatment of more patients.

No doubt, dentists disagreed on the concept of prophylaxis back in the 1980s. Very few textbooks or guidelines existed, and opinions ranged from calculus removal to flossing and medium-hard brushing once a day. Sedelmayer understood that the concept of preventative dentistry could only be founded on proper toothbrushing. As a consequence, he started to change not only the way dentistry was taught at the University of Hamburg, but also the hierarchy of dentistry itself. “Why
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practical prevention | individually trained oral prophylaxis

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The oral cavity is easy to access and most major causes of oral disease have been identified. In fact, proper devices and techniques have been developed only to be applied by everyone individually. Today, individual training is easier than ever.

**Change is just one generation away**

Although today’s dental professionals usually have improved oral hygiene, Sedelmayer seems to be right in saying that iTOP should be mandatory in dental schools. While the dentist of today might be difficult to convince, the future of preventive dentistry lies in the hands of those students who have experienced the patient perspective themselves. Those students will be able to carry on the virtue of prevention in schools and practices. In the end, change requires not only repetition and motivation, but also people willing to integrate prophylaxis in the current curricula of dental schools. This is a long-term goal with generations necessary to achieve it, but it is a goal only achievable through individual training and a motivated dental workforce.

Marios Domesthenous might be part of that generation willing to change the hierarchy of dentistry. He is a first-year dental student from Cyprus, currently studying in Greece. With an outgoing personality, he loves to travel and experience new things. His vision as a future dentist is to inspire patients and teach them how to achieve lifelong oral health. He heard about iTOP from a friend who attended the Curaden Student Camp in Portugal. Within two days, the iTOP philosophy had convinced him completely. “In medical science, we should always seek to prevent diseases and not cure them. We are so focused on treating the damage that we stop thinking about how to prevent it. We should not leave the iTOP philosophy behind, but teach it to our future colleagues and lecturers. From first-year students to older dental professionals, the iTOP philosophy is intuitive to everyone.”

In the classroom, Domesthenous sits right next to Volodymyr Tovarnytskyi, another first-year student, from Ukraine. At first, he was more excited to come to Prague, spend two nights in the Czech capital and meet dental students from all over the world. However, his enthusiasm for oral hygiene grew tremendously after he felt the interdental brush moving easily through his narrow anterior teeth. Back home, his university lecturers had taught him that medium-hard toothbrushes and dental floss should be used. Now, he feels overwhelmed after having experienced soft toothbrushes and interdental brushes. “I will be a dentist in the future. I need to know what pressure to apply and how to clean teeth.”

**Change needs to happen**

Back to Cologne. Just like Sedelmayer, Claudia Berki is a true pioneer in prophylaxis. She has been working at the University Medical Center Hamburg-Eppendorf at the Department of Preventive and Restorative Dentistry since 1984. Sedelmayer and Berki met in Hamburg and became close friends. While enjoying a short break, she is quick to summarise her impressions after the first few hours at IDS. “We are at a trade fair, so we are basically only speaking to dental professionals. And alarmingly, we found that some visitors do not clean their interdental spaces. We saw bleeding gingivae. As soon as we showed them interdental brushes and explained the benefits, the response was incredible.” Like her fellow iTOP instructors, Berki has decades of experience. Still, she has learnt that change continues to be necessary. First, one’s own behaviour needs to be modified, then the practice behaviour needs to adapt, and finally patient behaviour needs to change. All three steps are equally important. Lifelong oral health without education is impossible.

According to Berki, from a human perspective, it is difficult to say that someone has made a mistake—especially in front of patients. Five years ago, there were other approaches to hygiene that were regarded as the best methods at the time, but science develops and knowledge too. Biofilm management alone has come a long way in the past few years.

Cologne or Prague, in the dental office or at a coffee table, the dentist can choose between two approaches to oral hygiene today. He or she can show the patient prophylactic techniques using the Touch2Teach method and demonstrate how he or she can maintain his or her oral health for a lifetime, removing a bit of calculus in the process and giving the teeth a polish and so forth; or he or she can spend an hour simply removing calculus, polishing, applying fluoride treatments and so on. In the latter option, oral hygiene instructions are given through a nicely designed brochure or video in the waiting room. Which way will produce more successful results? iTOP automatically enhances patient satisfaction. Patients are grateful that having their teeth cleaned individually is a painless experience. In a world full of creatures of habit, a motivated and educated dental professional can change everyone.
Everyone is different—and so should his or her prophylaxis be. Dental professionals should recommend special toothbrushes for implants or bridges, for example.