“Up to ten times more plaque removal”

An interview with Maha Yakob, PhD, RDH, Global Director, Professional Relations and Scientific Affairs, Philips Oral Healthcare

By Dental Tribune MEA/CAPPmea

Maha is a scientific guru for Philips Sonicare. She started as a dental hygienist many years ago in Sweden while also lecturing at the Karolinska Institute. Karolinska is well known in the industry of dentistry since it has housed many Nobel Laureates, both in physiology and medicine. Dental Tribune MEA had a chance to hear from Maha on her evidence-based approach on Sonicare, the electronic toothbrush.

I was completely on the academic side when Philips approached me, and I joined them three years ago. What I implemented in the company was this whole evidence-based approach. Before I joined Philips, they had all these great studies that they had done, but they didn’t really focus as much on getting the publications to the professionals. We just assumed that once people tried Sonicare, they would love it. But then my focus shifted and I thought, let’s publish these papers and show our peers and colleagues why they should recommend Sonicare based on evidence.

In that case, they are not just recommending Sonicare because they like the product. Often we would hear dentists or dental hygienists say, I know it is working because when my patients come back they have fewer splitting gingivae. They could all see the clinical results, but our approach needed to be evidence-based.

Patients loved the product. It was just that the scientific part was missing, which is what we see now with the Journal of Clinical Dentistry, launched at the International Dental Show, with five studies that were published in this peer-reviewed journal.

In this special issue, you will find five papers. The first two are randomised control trials looking at Sonicare versus manual toothbrushes. Two randomly assigned groups are compared after one group receives a manual toothbrush and the other, a Diamond Clean. Not surprisingly, of course, Sonicare performed significantly better in the areas of plaque removal and gingival health.

In the first study, we saw that the Philips Sonicare Flosser, an electronic toothbrush, was statistically significantly more effective than a manual toothbrush in reducing supragingival plaque, gingival inflammation and gingival bleeding.

The second study showed that the Philips Sonicare FlexCare electric toothbrush with the Premium Plaque Control brush head significantly reduced gingival inflammation, gingival bleeding and plaque following two and six weeks of home use, compared with manual toothbrushing alone. This is how we substantiated the claim, “Up to ten times more plaque removal.”

The Sonicare toothbrush has flexible sides, allowing it more coverage of a larger surface area.

The objective of the third study was to evaluate the short-term clinical efficacy of high-frequency, high-amplitude sonic-powered toothbrushes compared with manual toothbrushes on plaque removal and gingival reduction in everyday use, through a meta-analysis of randomised controlled trials. The combined results of 11 studies with a total of 1,720 subjects showed that sonic-powered toothbrushes had significantly greater plaque removal. In conclusion, high-frequency, high-amplitude sonic-powered toothbrushes decreased plaque and gingivitis more effectively than manual toothbrushes in everyday use, in studies lasting up to three months.

Of course, studies one, two and three confirm that Sonic technology is superior to the manual toothbrush.

The fifth study is moving away from the clinical results, and it is statistically proven to significantly reduce gingivitis and plaque more effectively than manual toothbrushes in everyday use, in studies lasting up to three months.

Of course, studies one, two and three confirm that Sonic technology is superior to the manual toothbrush.

Study four is a head-to-head study done by an independent research organisation to compare the effect of the Philips Sonicare DiamondClean manual toothbrush used with the Premium Plaque Control brush head to the Oral-B Pro6000 used with the CrossAction brush head on gingivitis and supragingival plaque reduction. In the results, we can see that the numbers were significantly better than with the other technology.

The fifth study is moving away from simply brushing your teeth to using AirFloss as between your teeth as well. The addition of interproximal cleaning to manual toothbrushing is statistically proven to significantly reduce gingivitis and plaque compared with manual toothbrushing alone. Among the adjacent interproximal cleaning regimens, AirflossPro provides a similar reduction in gingivitis and plaque to string floss.

The question now is: shall I change to AirFloss when I floss every day? If you floss every day and you do it the right way, regular floss is acceptable. But, as a dental hygienist, I can tell you that very few of my patients floss every day and even fewer of them floss the right way. Airfloss was really developed for the majority of people who don’t floss every day, i.e. inconsistent flossers. There is a solution for them now that can help, is easy to use, is user-friendly and disrupts the biofilm. We wanted to make sure that it was backed by science, which is why we did the study. We saw that manual toothbrush users still had significant amounts of plaque, but as soon as we added the string floss or Airfloss, there was a reduction in plaque. In fact, we found eight times more plaque removal if something was used in addition to the manual toothbrush. Again, the scientific evidence suggests that Airfloss is as good as floss when you use it with a manual toothbrush and strands.

This is something we have shared with the community. We do trade shows, events and different kinds of summations of the studies. In the US, we aired a TV commercial that talks about the studies and, of course, the different conclusions.

Together with the FDI World Dental Federation, we are trying to educate and raise awareness. Partnership with the FDI’s World Oral Health Day is something of which we are very proud and it is our way of spreading the message.

For me, working for a company like Philips feels like the perfect fit. It is not just a technology company, but also a health tech. Forget the lights and everything else that people associate with Philips, it is a health tech company that has everything from diagnosis to home treatment to prevention, and we are really focusing on the holistic approach so that the FDI’s World Oral Health Day is about increasing awareness of the oral systemic link. That’s why a partnership with the FDI is perfect – it increases public awareness and helps you make the smart decision about what you are using in daily care. Many people are still unaware of good oral health care, especially in this region. They still use manual toothbrushes, which means we still have plenty of work, but I think we have more to do in education.

Maha Yakob, PhD, RDH
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Pregnant women are hardly informed about the importance of oral health

By DTI

A new mother herself, pregnancy gingivitis has become a subject close to Dr Anja Carina Borët’s heart. She set up a joint campaign between Oral-B and the European Federation of Periodontology (EFP), which promotes oral health during pregnancy and educates health professionals and the wider public on the issue. Originally trained as a dentist in Mainz in Germany, Anja now serves as the Manager Europe at Procter & Gamble in Geneva in Switzerland, where we met with her for some questions and answers on the subject. Fittingly, she brought along her 4-month-old daughter, who cooed quietly in her pram throughout the interview.

Oral-B and the EFP have touched upon a very important and personal topic, in that periodontal disease could affect the developing baby.

Dr Anja Carina Borët: Yes. Gingivitis is a well-known side-effect during pregnancy and the latest data shows that practically every pregnant woman suffers from it. The number of bleeding sites is about three times higher in pregnant women than in the average adult. Even I, a dentist equipped with more than enough scientifically sound Oral-B products, experienced some gingival bleeding for the first time in my life!

As we know, untreated gingivitis can lead to periodontitis, the inflammatory burden of which can negatively impact pregnancy. Although more consistent in-depth studies are necessary, periodontitis during pregnancy has already been linked with premature birth, low birthweight and pre-eclampsia. This topic is important as most pregnant women are not aware of this problem and therefore often do not recognize the warning signs of gum problems such as bleeding or sensitive gums. With our campaign, we want to inform women and make sure they take good care of their oral health and see a dental professional in order to prevent possible oral health problems and pregnancy complications.

How can periodontitis lead to these complications?

Clinical studies suggest that bacteria from the oral cavity —specific microorganisms associated with periodontitis—colonize the foetus and the placenta, with blood as the most likely vehicle of transmission. As a consequence, the presence of periodontal bacteria in the feto-placental unit may activate a local immune or inflammatory response that might negatively affect the pregnancy.

Biologically, that makes perfect sense, but how widely accepted is this point of view?

Although clinical research on the matter has existed for years, it is still a fairly neglected topic. Not only does it not receive enough attention from dental professionals, it is also largely overseen by healthcare professionals such as gynaecologists and midwives. When I was pregnant, I was warned about many potential risks, ranging from flying to eating sushi or drying my hair. I did enough research on the aforementioned “risks” to conclude that there is no scientific data to support these. However, no one—my gynaecologist included—told me to go and see a dental professional or take care of my oral health.

To me, this really is a very personal matter, as I felt pregnant while establishing the cooperation concerning pregnancy gingivitis with the EFP. I find it worrying that pregnant women are hardly ever informed about the importance of good oral health during pregnancy. Therefore, I was passionate about establishing the Oral-B/EFP cooperation and lead the joint campaign. Our aim is to better educate dental professionals and medical professionals in general, as well as the wider public, on the importance of good oral health during pregnancy.

Could you explain the changes in the bodies of pregnant women that cause pregnancy gingivitis?

The biggest hormonal changes in a woman’s life take place during pregnancy. It is a period of great change and obviously the mouth is one of the main areas affected by such changes, which in itself can lead to gingivitis.

It is not for nothing that people used to say that women gain a child and lose a tooth. During pregnancy, there is a 150 times increase in oestrogen compared with the amount during a normal menstrual cycle. This and the increase of progesterone and other hormones lead to an increased vascular permeability of gingival tissues, which promotes gingival inflammation in the presence of dental plaque. For women who have already developed periodontitis, the situation usually gets worse because of the changed hormonal situation.

Apart from cardiovascular disease, periodontal disease is known complication of diabetes. What is the risk of pregnant women with diabetes developing periodontitis?

For women who already have diabetes, the biggest challenge is to keep their blood sugar under control. Independent from this, a small percentage of women develop diabetes during pregnancy. Although this type of diabetes disappears after pregnancy, these women need treatment in order to avoid serious complications. Both groups, however, have a higher risk of developing periodontal disease. It is important to note that treatment is more likely to succeed if a person’s blood sugar levels are under control. Vice versa, periodontal disease also negatively impacts diabetes. Overall, it is important that women with diabetes take care of their oral health before and during pregnancy.

How do you integrate all of your findings in your Oral-B seminars?

Oral-B’s mission is to promote oral health and work closely with dental professionals to ensure optimal home care. Our collaboration with the EFP serves as a way to raise awareness about all matters concerning oral health during pregnancy. Our educational activities such as the Up-to-Date events are a way to communicate this and support dental professionals in their objective to improve oral health. We believe a healthy mouth is part of a healthy body and promoting good oral health during pregnancy is one way to help achieve this.

Finally, what would your tips be for pregnant women?

Women who have periodontitis must seek treatment before pregnancy, whereas women who enjoy good oral health should go and see a dentist or a dental hygienist in the second trimester for a dental cleaning. Of course, they should brush their teeth twice a day with a fluoride-containing toothpaste—even better is an antibacterial toothpaste containing stannous fluoride—and clean their teeth interdentally. It is scientifically proven that electric brushes such as our Genius toothbrushes are particularly good for removing plaque and gingival bleeding. Moreover, they are a practical solution for women who have less time to brush their teeth. There is no question that all mothers with a baby will know exactly what I am talking about.

Dr Anja Carina Borët

EFP

Oral-B

Dental health professionals

Gynaecologists, cardiologists and endocrinologists too should be aware of this connection. That being said, many women avoid professional dental care during pregnancy and, conversely, many dental professionals are insecure about treating pregnant patients. However, female patients of childbearing age should be informed about the importance of oral health during pregnancy. This is especially important for patients who suffer from periodontitis. These patients should be encouraged by dental professionals to undergo treatment before pregnancy. During pregnancy, non-surgical periodontal therapy has been considered safe in the second trimester.

By DTI

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Preservation of root cementum: A comparative evaluation of power-driven versus hand instruments

By Bexbay E, Dominio F, Golobogut AT, Cirani S, Guida L, Aydin MS, Mariotti A, Piloni A, Italy

Background
Ginsel et al suggested that cementum plays an important regulatory role in periodontal regenerative. One of the major goals of periodontal treatment is the removal of pathogenic microorganisms by scaling and root planning. In the past the misconception was to obtain a root surface with smooth and hard surface characteristics that was free of endotoxins which resulted in the removal of the subgingival plaque and calculus deposits, and the removal of all or most of the cementum. Recent studies have reported that endotoxins were not located within cementum and removal of ‘diseased’ cementum was not necessary for a successful periodontal treatment. Saygin et al concluded that preservation of cementum on the root surface was necessary for new attachment and as a source of growth factor. Hence non-aggressive removal of cementum is essential for optimal periodontal health and regeneration.

Ultrasonics with new shaped tips and subgingival air polishing devices has been developed for removal of root accretions with minimal root damage. Air polishing has been suggested as a treatment modality for root debridement resulting in polishing depth reductions and removal of subgingival biofilm. No scientific evidence exists today showing the loss of root substance or surface roughness produced by either ultrasonics or Air polishing.

Aim
To assess the amount of cementum remaining following in vivo root instrumentation as well as the surface characteristics of the retained cementum.

Material and Methods
- 48 caries free, single-rooted teeth in 27 patients diagnosed with severe chronic periodontitis with periodontal probing depth (PPD) 15 mm in at least two sites per tooth with radiographic loss of more than two thirds of root length and scheduled for extraction were included in this study.

Teeth were randomly divided into four treatment groups: Instrumentation was performed with medium power settings

3. Air polishing with the glycine powder (Air-Flow Powder Perio, Perio-Flow Nozzles; EMS SA)-AP
4. Hand instruments (Gracey curettes C3, C5, C6, C7, L, AYDIN, MT, USA)-HC

Treatment
- One apical root surface of each tooth was randomly subjected to debridement, and the other apical root surface was used as control.

- Following instrumentation, the teeth were immediately extracted traumatically and analyzed with a dissecting microscope:
  - Remaining calculus, root surface roughness and loss of root substance were evaluated along with scratches, gouges, cracks, and any other changes in the cementum that was present.

Results
- Percentage of coronal cementum remaining following subgingival instrumentation was 83% for U, 80% for U + AP, 95% for AP and 65% for HC.
- The amount of retained cementum with AP was significantly greater than with HC SEM.
- Smoothest root surfaces were produced by the HC followed by the AP.
- Conal and apical sections showed that AP produced the least amount of cementum loss and therefore the greatest retention of residual cementum.
- Root surfaces instrumented by U or U + AP presented grooves and scratches.

Time taken to complete root instrumentation:
- Shortest time taken was using AP and the longest time was with U + AP.
- AP required 35% less time for root preparation in comparison to HC, whereas U + AP needed 50% more time.

Conclusions
- Air polishing was significantly more effective and superior in preserving cementum.
- Hand instrumentation using curettes was most effective in removing cementum in comparison to ultrasonics or hand instruments.

Editorial Note: The article was originally published in International Journal of Dental Hygiene.
08 September 2016, page 118
The study found that the prevalence of periodontal disease was increased in patients with RA and could be a key initiator of RA-related autoimmunity. This is because autoreactivity in RA is characterised by an antibody response to citrullinated proteins in which the amino acid arginine has been converted into the amino acid citrulline, altering the proteins’ structure. The oral bacterium Porphyromonas gingivalis is the only human pathogen known to express an enzyme that can generate citrullinated proteins.

Periodontal disease may be key initiator of rheumatoid arthritis

By DTI

AMSTERDAM, Netherlands: In recent years, increasing attention has been given to aspects of oral health in patients with rheumatoid arthritis (RA), especially related to associations with periodontal disease. The results of a study conducted at the University of Leeds in the UK, and recently presented at the Annual European Congress of Rheumatology (EULAR 2018) in Amsterdam, demonstrated increased levels of periodontal disease and disease-causing bacteria in individuals at risk of RA.

The study included 48 at-risk individuals (positive test for anti-citrullinated protein antibodies), 26 patients with RA and 52 healthy controls. The three groups were balanced regarding age, sex and smoking.

“It has been shown that RA-associated antibodies, such as anti-citrullinated protein antibodies, are present well before any evidence of joint disease. This suggests they originate from a site outside of the joints,” said study author Dr Kulveer Mankia, clinical research fellow at the university’s Institute of Rheumatic and Musculoskeletal Medicine. “Our study is the first to describe clinical periodontal disease and the relative abundance of periodontal bacteria in these at-risk individuals. Our results support the hypothesis that local inflammation at mucosal surfaces, such as the gums in this case, may provide the primary trigger for the systemic autoimmunity seen in RA.”

“We welcome these data in presenting concepts that may enhance clinical understanding of the key initiators of rheumatoid arthritis,” said Prof Robert Landewe, Chairperson of the EULAR 2018 Scientific Programme Committee. “This is an essential step towards the ultimate goal of disease prevention.”

The study abstract is titled “An increased prevalence of periodontal disease, Porphyromonas gingivalis and Aggregatibacter actinomycetemcomitans in anti-CCP positive individuals at risk of inflammatory arthritis.”

Patient motivation techniques

By DTI

When it comes to motivating patients to maintain good oral hygiene practices, a clear plan is essential given the time constraints of most dental appointments. What this plan entails, however, depends on what the most pressing issues to the patient are. Prevention magazine spoke with Sandy Basheda, a dental hygienist at M & N Dental Practice for three years now. I started basically straight after I graduated from the University of Liverpool with a degree in dental hygiene and therapy. Prior to that, I had a background in dental nursing, but I wanted more of an instrumental role with dental patients, which led me to hygiene and therapy.

What does your average day at work involve, and what is the structure of your oral hygiene appointments?

I see many patients with periodontal problems and so conduct a lot more hygiene right now than therapy. I also deal with a lot of children that, unfortunately, have dental caries due to a poor diet, lack of oral hygiene and likely a lack of education on how to prevent it. It’s not a good start for children if they have to have fillings put in or even have their teeth pulled if it’s particularly bad—it doesn’t give them a good first impression of the dentist.

Each oral hygiene appointment is scheduled for half an hour and begins with a discussion about the patient’s existing problems and current oral hygiene routine. I then explain to the patient the purpose of the appointment and what it will entail and conduct an assessment of his or her oral health. Every patient is different, and it really depends on what he or she needs addressed as to how the appointment will proceed from there.

How can you get patients to continue with good oral hygiene practices after an appointment?

I think one has to build a relationship with them. They have to trust one and understand what the benefits of oral hygiene are, as they might not be aware that they have any problems in the first place. For example, if smokers aren’t experiencing any benefits, they might not think that there’s anything to worry about. One needs to be able to explain to them in a clear and understandable way why taking care of their teeth is important not just for their oral health but their overall health too.

But is it possible to achieve this all within half an hour? Well, it’s not a lot of time, but we can always schedule an hour-long appointment if it is necessary. I see many anxious patients, patients who might not have been to the dentist in ten to 15 years. With these patients, a shorter appointment is often good in the beginning, because it means they’re not overwhelmed and that one can build up from them over the ensuing sessions. By the second or third appointment, they’re a bit more relaxed and eager for treatment.

How do you motivate your patients to take charge of their own oral hygiene?

I think it’s mostly about re-educating patients on what the correct and most effective cleaning methods are, what products are best for them. It’s about finding something that works for the patient, something that will get him or her excited about taking care of his or her teeth and seeing the benefits. In dentistry, it can be difficult to engage in a cooperative relationship with one’s patients—or, ten, it’s a one-way conversation with the professional giving the patient instructions or advice on how to take care of him or herself. I like to leave that sort of instructional conversation to the beginning or the end of the appointment, as this allows the patient to think, while in the chair, whether he or she has any questions. I’ve found that our future appointments will entail being able to answer these questions in a clear and understandable way so essential to motivating patients.

Thank you very much for the interview.
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Oral hygiene instructions and patient motivation with and without dental hygienists

An interview with Dr Eric Thevissen, periodontist and pioneer of Belgian prophylaxis

By OTI

Dr Thevissen, I wanted to talk to a dental hygienist in Belgium. Why is that not yet possible?

Dr Eric Thevissen: Well, the good news is that, from June 2019 on, it will be possible to visit and talk to a dental hygienist in Flanders. Why Flanders has waited such a long time to start the education and training of dental hygienists is politically moti-
tivated and due, in large part, to the repre-
sentative dental associations. Belgium has a long tradition of one-
clinic dentists, often working with-
out dental assistants. Since the intro-
duction of a quite difficult admission exam for dentistry in 1997, the dis-
cline has attracted fewer students. As a consequence, the number of graduat-
ing students has dramatically decreased, while the demand for dental care is continually increasing. Slowly, but surely, more and more group practices have emerged, hur-
ing dental assistants. Back in 2006, the first meetings were organised be-
tween universities and dental socie-
ties about the qualifications needed to become a dental hygienist and the tasks that could be delegated to them. As always, there were propo-
nents and opponents, and it took a very long time before all stakehold-
ers agreed on the conditions and cri-
teria needed to start dental hygiene training in Leuven and Ghent.

Let’s talk about your study “The provision of oral hygiene instructions and patient moti-
vation in a dental care system without dental hygienists”. Please tell us more about it.

Thirty years ago, I started working as a periodontist in Hasselt with anoth-
er colleague. Since we were the first in Flanders, we had a flying start. After a few years, I noticed that dentists were always re-
ferring patients to our clinic with the same complaints, such as bleeding gingivae or had oral hygiene. In my opinion, treating bleeding gingivae or giving oral hygiene instructions is the duty of every dentist and belongs in the sphere of primary dental care rather than in secondary or specialist care. Although we organised courses where a general dental practitioner (GDP) could learn about patient in-
struction and guidance, I realised that we were considered by a large number of GDPs to be dental hygienists rather than periodontists. The truth was that we were both, peri-
odontists and dental hygienists. This annoyed me because I knew that in neighbouring countries periodon-
tists could spend their precious time on the work they were trained for.

In 2004, I took the initiative to set up a pilot study in Limburg with 65 GDPs who used the Dutch Periodontal Screening Index, a screening test for periodontal sta-
tus that had been introduced in the Netherlands a few years earlier. We collected data from 844 patients. The results clearly showed: The screened age groups had, on the whole, periodontal problems and that GDPs was a high need for treat-
ment.

Around the same time, Prof. Hugo De Bruyn joined the teaching staff of Ghent University’s Department of Dental Sciences. Probably thanks to my publication, he asked me to come one of his staff members. Working with Prof. De Bruyn, one is quickly involved in clinical research and is more able to in-
vigorate, in depth, the questions that had bothered me ever since I started my career. One of these ques-
tions was the kind of oral hygiene instructions GDPs provide to their patients.

Using questionnaire responses of 776 dental professionals gathered for various postgraduate courses in Flanders, we were able to determine that, given the absence of dental hygienists in Belgium, oral health instructions and patient motivation appeared to be non-compliant with international guidelines. Though dental professionals were concerned with prevention, there were several mitigating factors working against them delivering this adequately.

The study mentioned lack of time, remuneration and patient interest as complicat-
ing factors for the provision of preventive care. However, qualifications, knowledge and time are crucial for provid-
ing oral hygiene instructions and patient motivation. Can dental hygienists be seen as a solution to these problems?

It is my conviction that dental hy-
giennists are the solution to these complicating factors. Prophylactic care will be the main target of their work, since dentists are primarily trained for restorative care. Owing to factors such as the decreasing num-
ber of graduating dental students, the increasing number of retiring dentists in the next ten years, an age-
ing population and a higher demand for preventive care, the stress of work increases and forces dentists to manage their work time more strictly. Of course, GDPs prefer re-
storative and other more rewarding techniques between Flemish GDPs and periodontists. In this second one, we compared our rather unique Bel-
gium system with the Dutch system, a completely differently structured healthcare system including dental hygienists. We wanted to compare GDPs and the Dutch system represented the gold standard and how we were situated in Flanders.

The results showed that periodon-
tists and dental hygienists shared more common viewpoints than GDPs and dental hygienists did. What was remarkable was the fact that more than 80 per cent of periodontists and dental hygienists were satis-
fied with their efforts in informing patients, compared with 38 per cent of GDPs. Secondly, whereas GDPs indicated nurture as the factor most contributing to the oral hygiene level of the patient, periodontists and dental hygienists focused on the interaction of the den-
tal practitioner and a patient-centred approach. In our multivariate analy-
sis, the presence of charitable assis-
tants seemed to be of major impor-
tance.

But, as always in questionnaire-
based studies, the results can be biased by socially desirable answers and by the inevitable structural differ-
ences between Flanders and the Nether-
lands. One of these differ-
ces, for example, is the fact that GDPs are not reimbursed in the Belgian den-
tal care system, which certainly considered an autonomy.

What should the role of the dental practitioner in the successful treatment of peridontal disease be? What does the patient need to do?

The role of the dental practitioners, in particular the GDP, undoubtedly remains to keep a panoramic over-
sight over everything that has to do with the dental and oral health of the patient. Especially considering the introduction of dental hygienists in the near future in Belgium, the den-
tist’s role as a supervising manager is hygienic, medication, age, nutrition and different systemic factors have been shown to accelerate the devel-
ment of periodontal disease, but which of them insist on not being treated for things they do not complain about, as they see these treatments as unnecessary.

If I personally have to undergo an annual medical check-up, I would hope that all the exams needed are performed, and not just set me at ease. Why then does this appreciation not apply to oral health?

What are some of the oral hygiene instructions and patient motivational actions that you have been performing?

Thanks to research and clinical find-
lings, lifestyle habits, genetics, stress, nutrition and various different systemic factors have been shown to accelerate the develop-
ment of periodontal disease, but which of them insist on not being treated for things they do not complain about, as they see these treatments as unnecessary.

Finally, the patient should demon-
strate his or her home care habits using his or her toothbrush. We distinguish four levels of patients: the lowest level is the patient who is almost totally ignorant about proper home care; the second level is the patient who brushes his or her teeth on autopil-
lot without paying any attention to technique, time duration or inter-
dental cleaning; the third level is the patient who performs regular, even over the interdental spaces, but unfor-
tunately not frequently enough or not with adequately brushing techniques; and finally, the fourth level is the patient who performs extremely well and needs none or only minor adjust-
ments, for example tongue brush-

In accordance with the technique of motivational interviewing, we build up a conversation with the patient while giving instructions, waiting for approval, repeating and

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counselling. One needs two or three control sessions to check his or her dexterity and oral cleaning performance. Plaque disclosure remains a confronting but very effective tool to show the results of the patient’s cleaning habits.

Finally, the dental professional should show enthusiasm and keep on repeating until there are visible improvements.

From your point of view, does the dentist spend enough time on the diagnosis of a disease? Of course, dentists are dutiful people who are concerned with their jobs. Spending time in control from patient to patient may decide to spend more time on patient guidance. This requires more time when they come across a patient’s face how motivated he or she is, nor what he or she is interested in. This is not often asked of the patient, so one could rather say there is not enough time spent on communication.

I insist practitioners to do an experiment in their waiting rooms. While the patient is waiting for his or her appointment, one could be given a short questionnaire asking him or her to write down in a few words how they evaluate the appearance of proper home care and his or her personal ritual. The patient can then be asked if he or she would be interested to know more about it. We use this method in our clinic. In the waiting room, patients have time to reflect and one might be surprised at how interested patients really are if one gives them the opportunity to communicate and to prepare their questions.

To be honest, I think that primary prophylaxis is impossible to achieve because we do not control all the influencing factors, of which some can be health-related or patient-related. It means that we need to try to prevent people from developing caries or periodontal disease. This is something that, since caries and periodontal disease are the most widespread infections diseases present in almost every patient. Twenty-five per cent of 5-year-old children have already gingivitis, and this figure rises to 55 per cent for 15-year-olds. Primary prevention is like placing speed cameras on highways. It works all the time for those who speed, and it is highly effective and reasonably justified. Today, I heard in the news that, thanks to these speed cameras and other regulations, the number of persons killed by traffic every year is diminishing. This is primary prevention. However, I strongly believe in secondary prevention, it is the dentist’s duty to examine and to intervene, prepare your question before detrimental clinical signs occur.

How important are home care and high-quality oral hygiene products such as those of CURAPROX? It is a fact that oral hygiene devices are not considered as pharmaceuticals and they therefore don’t have to be thoroughly tested. If a company designs a race, a good-looking toothbrush, it is allowed to produce it and sell it, even if the brush does not meet the criteria desired in an effective toothbrush.

Comparing the oral hygiene products from different companies, we see a variety of designs and features. This is interesting because there is no such thing as the perfect interdental brush. There are always compromis- es to make and what some patients like, may be rejected or disapproved of by others. We as dentists have only an advisory, consultative role.

Nevertheless, CURAPROX makes various products designed by dental professionals, and the company is willing to listen to advice on how to improve its products.

What is the status of dental hygiene in Belgium? In other words, how does the Belgian mouth look? When I go abroad to congresses and meet with peers, I feel their dissatisfaction with the mouth look? in almost every patient. Twenty-five per cent of 5-year-old children have already gingivitis, and this figure rises to 55 per cent for 15-year-olds. Primary prevention is like placing speed cameras on highways. It works all the time for those who speed, and it is highly effective and reasonably justified. Today, I heard in the news that, thanks to these speed cameras and other regulations, the number of persons killed by traffic every year is diminishing. This is primary prevention. However, I strongly believe in secondary prevention, it is the dentist’s duty to examine and to intervene, prepare your question before detrimental clinical signs occur.

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