oral health education by itself ineffective

By DTI

MELBOURNE, Australia: Evaluating the effectiveness of oral health promotion strategies for preventing dental caries and periodontal disease among children, researchers from the Cochrane Public Health Group have found that oral health education alone, such as classroom lessons, videos, comics and brochures, was ineffective.

From analysis of the results of 38 international studies, the Cochrane researchers found that oral health education as a stand-alone measure, had no significant impact on caries in permanent or primary teeth and surfaces. Nonetheless, some of the studies reported improvements in gingival health, oral hygiene behaviours and oral cleanliness, the review showed.

“There is a general perception that oral health education will change oral health risk behaviours and promote good oral health practices,” commented Dr Shalika Hegde, a research fellow at Dental Health Services Victoria in Melbourne and part of the Cochrane Public Health Group, on the findings in an article on Digitaljuliet.com. “However, this thinking is fundamentally flawed, as knowledge gained alone will not lead to sustained changes in oral health,” Hegde emphasised.

When coupled with other measures, such as supervised tooth-brushing with fluoridated toothpaste, oral health promotion interventions were generally found to be effective in reducing caries in children’s primary teeth. Moreover, oral health education provided in an educational setting, combined with professional preventative oral care in a dental clinic, was effective in reducing caries in children’s permanent teeth, the researchers found.

Another most promising intervention approach for reducing caries in children—although additional research is needed—appears to be improving access to fluoride in its various forms and reducing sugar consumption, Hegde told Dental Tribune. Generally, the findings of this review will have global implications in the area of models of oral health care delivery and oral health promotion, research, policy and practice, Hegde concluded.

The review, which was the first of its kind at an international level, included data on 113,789 children in 21 countries from studies conducted between January 1996 and April 2014. All of the studies reviewed focused on community-based oral health promotion interventions for preventing caries and periodontal disease among children from birth to 18 years of age.

The review, titled “Community-based population-level interventions for promoting child oral health”, was published online on 19 September in the Cochrane Database of Systematic Reviews.
First Indonesia Dental Exhibition and Congress to be held in 2017

By DTI JAKARTA, Indonesia/COLOGNE, Germany: Exclusively catering to the needs of the Indonesian dental industry and dental professionals, the country’s first comprehensive dental exhibition and congress will take place next year from 15 to 17 September at the Jakarta Convention Center. The event is being jointly organised by the Indonesian dental association (Persatuan Dokter Gigi Indonesia) and trade show organisers Koelnmesse and PT. Traya Eksibisi Internasional. It will be held in alternate years to the established IDEM Singapore, the leading dental exhibition and conference in the Asia-Pacific region.

Alongside IDEM, the Indonesia Dental Exhibition and Conference will be positioned as a designated regional event, the organisers said in a press release. It will consist of a two-day scientific conference featuring localised educational content and a three-day exhibition that will offer a platform for over 200 manufacturers to meet and do business in the emerging Indonesian dental market, which is one of the fastest growing in Asia.

Although every edition of IDEM Singapore has enjoyed strong support from Indonesian dental professionals, we have come to recognise that there is still unrealised potential in the Indonesian market. Its healthcare industry is expected to grow by up to 20 per cent yearly, which points to an emerging need for a platform for dental professionals to learn more about well-established and effective technologies, research, and skills,” Koelnmesse Managing Director Matthias Kuerrer remarked.

Commenting on the decision to stage the new dental event, Dr Faridjah Hanum, president of the Indonesian dental association, said that, by collaborating with two established exhibition organisers, dentistry in the country will hopefully be taken to new heights. “Indonesia has over 7,000 dentists nationwide, who face unique challenges in their daily practice,” Hanum said. The city of Jakarta — representing over 5,000 dentists alone — was chosen to host the event because it is the country’s central business and travel hub, he explained.

More information about the exhibition and the scientific programme will soon be available at www.indonesiadentalsalespo.com.

Accuracy of optical scans and conventional silicone impressions

By DTI IWATE, Japan: Aiming to evaluate the accuracy of digital impressions for use in implant placement, researchers from Iwate Medical University in Japan have compared optical impression scans from an intraoral scanner with conventional silicone impressions. The analysis showed that the distance error of the optical impressions was slightly greater that of the conventional method.

For many dental practitioners, digital technology has become vital in daily practice. Others, however, still rely on conventional methods used in the profession long before the introduction of digital alternatives. However, the question that arises in this connection is whether - apart from benefits such as being faster and often more convenient — digital methods are verifiably more accurate than traditional techniques.

Aiming to shed light on this issue, the Japanese researchers compared a virtual model created from a scan by an intraoral scanner to a working cast fabricated based on a conventional silicone impression technique. The evaluation was limited to the use of optical impressions for implant placement. For this purpose, the researchers placed two implant abutments (Nobel Biocare), one 5 mm and one 7 mm in height, in a master model.

To evaluate the error of the intra-oral scanner, the master model was scanned ten times with the Lava Chairside Oral Scanner (Lava COS; 3M ESPE). To evaluate the error of conventional impressions, ten working casts were scanned with a computer numerical control measuring machine (Zeiss).

From comparison of the distance between two ball abutments that were connected to the implants, the researchers found that the trueness of distance error was 64.5 µm for the scanner and 23.5 µm for the working casts, making the conventional impression more accurate than the scanner.

For the 5 mm healing abutment, the mean angular error of the Lava COS was greater than that of the working cast, indicating significant differences in trueness and precision, the researchers wrote. However, this was not observed for the 7 mm abutment.

As distance errors of the optical impression were slightly greater than that of the conventional impression, the researchers concluded that currently digital impressions are not equivalent replacements of conventional impressions for restorative procedures. However, they predicted that the development of information technology would most likely lead to improvement in the accuracy of optical impressions in the near future.

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