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 DrBicuspid.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 toothbrushing with fluoridated toothpaste, oral health education, combined with other factors, such as parents’ involvement, had a positive impact on oral health.

International researchers from the Cochrane Public Health Group have aimed to determine which promotion strategies are most effective and equitable in preventing poor oral health.

(Photograph: Anna Hoychuk/Shutterstock)
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 Online. 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 203,989 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 13 September in the Cochrane Database of Systematic Reviews.

Saliva may indicate susceptibility to depression in boys

By DTI

CAMBRIDGE, UK: For the first time, researchers at the University of Cambridge have identified a biomarker for major or clinical depression in human saliva. An examination of saliva samples of hundreds of teenagers revealed that boys especially may be at greatest risk of depression.

Following a group of boys and girls over 12 to 16 months by measuring levels of cortisol in their saliva, as well as collecting self-reported information on symptoms of depression, the researchers found that boys with depressive symptoms and elevated morning cortisol were 14 times more likely to develop clinical depression compared with boys with neither.

However, the connection was not as distinctive in female participants. Girls with high cortisol and depressive symptoms four times more likely to develop depression, suggesting differences between the sexes in how depression develops.

Clinical depression is a severe and common illness, affecting one in six people at some point in their lives, according to the researchers. To date, however, scientists have lacked validated biomarkers for the condition in the youth population at large to aid the detection of at-risk groups for depression in general and in boys and young men in particular, partly owing to its various causes and symptoms.

“Through our research, we now have a very real way of identifying those teenage boys most likely to develop clinical depression,” said Prof Ian Goodyer from the university’s Department of Psychiatry. “This will help us strategically target prevention and interventions at these individuals and hopefully help reduce their risk of serious episodes of depression and their consequences in adult life.”

The study, titled “Elevated morning cortisol is a stratified population-level biomarker for major depression in boys only with high depressive symptoms,” was published on 18 February in the Proceedings of the National Academy of Sciences of the United States of America journal.